WAS THE GROUP DYNAMIC PHENOMENON GROUPTHINK PRESENT ON
BOARD THE USS *GREENEVILLE* (SSN-772) WHEN SHE COLLIDED
WITH THE JAPANESE FISHING VESSEL *EHIME MARU*?

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE
General Studies

by

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Fort Leavenworth, Kansas
2002

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

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Thesis Title: Was the Group Dynamic Phenomenon Groupthink Present on Board the USS *Greeneville* When She Collided with the Japanese Fishing Vessel *Ehime Maru*?

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

WAS THE GROUP DYNAMIC PHENOMENON GROUPTHINK PRESENT ON
BOARD THE USS *GREENEVILLE* WHEN SHE COLLIDED WITH THE JAPANESE
FISHING VESSEL *EHIME MARU*?, by CDR Gary W. Butterworth, USN, 95 pages.

Group dynamics have been a topic of interest and research that has puzzled generations
and continues to captivate the experts. Twenty-five years ago, Irving Janis, professor of
psychology at Yale, first presented his theory of groupthink. Janis introduced the term
"groupthink" to refer to "a mode of thinking that people engage in when they are deeply
involved in a cohesive in-group, when the members striving for unanimity override their
motivation to realistically appraise alternative courses of action" (1972, 8).

On 9 February 2001 Navy Commander Scott Waddle, Commanding Officer of the fast
attack nuclear submarine USS *Greeneville,* ordered his boat to a depth of around 400 feet
and directed an emergency blow maneuver. When the USS *Greeneville* broke the surface
of the Pacific she collided with the Japanese fisheries training vessel, the *Ehime Maru*.
The *Ehime Maru* sank within 45 seconds along with the souls of nine Japanese nationals.

Commander Waddle and his crew were recognized as one of the best in the Pacific Fleet.
What went wrong? This thesis explores the groupthink phenomenon and utilizes Janis'
theory to come to the conclusion that groupthink was indeed present and was one of
many causal factors of the accident.

ACKNOWLEDGMENTS

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ACRONYMS

AVSDU	Analog-Visual Signal Display Unit
CEP	Contact Evaluation Plot
CDR	Commander
CO	Commanding Officer
COMSUBPAC	Commander, Submarine Force Pacific
DOD	Department of Defense
DOOW	Diving Officer of the Watch
DVE	Distinguished Visitor Embarkation
FTOW	Fire Control Technician of the Watch
LCPO	Leading Chief Petty Officer
LTJG	Lieutenant Junior Grade
M/V	Marine Vessel
NASA	National Aeronautic and Space Administration
NAV	Navigator
NCOI	Navy Court of Inquiry
NWP	Naval Warfare Publication
OOD	Officer of the Deck
PCO	Prospective Commanding Officer
POD	Plan of the Day
PXO	Prospective Executive Officer
SECNAV	Secretary of the Navy
SSN	Attack Submarine Nuclear

SOP	Standard Operating Procedure
TMA	Time Motion Analysis
XO	Executive Officer

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CHAPTER 1

INTRODUCTION

When men yield up the privilege of thinking, the last shadow of
liberty quits the horizon. (Brainy Quote 2002, 1).

Thomas Paine

General Introduction

The dynamics of a group have been a topic of interest and research that has

puzzled many generations and continues to captivate the experts. There are many

questions surrounding the dynamics that form a group and just as many conflicting

theories that attempt to answer them. Is the group a fair representation of the individual

members' attitudes and behaviors? If not, why do the members participate in the group?

Is it necessary to study groups at the individual level? For a long time sociology and

social psychology have attempted to further the understanding of group behavior. It is an

ongoing debate as to whether human social behavior could best be understood by

studying the individual or by studying the various collections of peoples or groups.

The majority of social psychologists argue that it is the single individual and his

or her attitudes and behaviors that contribute to the total group. While these researchers

and theorists acknowledge the influence of groups on an individual, they maintain that

the individual is responsible for his or her own actions and, therefore, controls the actions

of the group (McDougall 1920, 13). Whereas the social psychologist studies the

individual in the group, the sociologist deals with the group as a whole (Durkheim 1928,

128-129). Most sociologists believe that it is not necessary to study the individuals

because the group is the true indicator of social behavior. They believe that the group is

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more real than the individual (Richmond 2001, 5). The crew of a Navy nuclear

submarine is a group of professionals thrown together by chance. Although they have the

requisite training and come from a similar environment (the Navy) they may share very

little as far as history, family norms, religion, faith, and others with their other

crewmembers. This paper will explore the group behaviors of the crew of the USS

Greeneville, specifically on 9 February 2001.

<div align="center">Background</div>

On 9 February 2001 Navy Commander Scott Waddle, Commanding Officer (CO)

of the fast-attack nuclear submarine USS *Greeneville,* pulled his boat out of port in Pearl

Harbor, Hawaii. As one of the best and most recognized fast-attack boats assigned to

Commander Submarine Force Pacific (COMSUBPAC), the USS *Greeneville* routinely

handled special missions for the Admiral at Commander Submarine Force Pacific. The

Greeneville's mission on the ninth of February was no exception. On this day the USS

Greeneville was playing host to sixteen distinguished civilians who were being afforded

the opportunity to go underway on a U.S. Navy nuclear submarine. As the six-hour

journey was nearing its completion, Commander Waddle wanted to send the visitors off

experiencing what some submariners refer to as a "rollercoaster at sea." Commander

Waddle was going to conduct an emergency blow maneuver, whereby the submarine

dives to a depth of about 400 feet and then blows her ballast tanks, causing the submarine

to ascend to the surface at a very high rate of speed. Once started, this maneuver cannot

be easily stopped due to the shortened time of the ascent and the time required to vent the

ballast tanks with water. Prior to conducting this maneuver, Commander Waddle ordered

the submarine to periscope depth, as required by regulations, so he could scan the area to

ensure no surface contacts were in the vicinity. Confident that he saw nothing through the periscope, he ordered the USS *Greeneville* to a depth of 400 feet and ordered the emergency blow. When the USS *Greeneville* broke the surface of the Pacific she collided with the Japanese fisheries training vessel, the *Ehime Maru*. The *Ehime Maru* went to the bottom within forty-five seconds, along with the souls of nine Japanese nationals.

What might the USS *Greeneville* collision have in common with the Holocaust, the Bay of Pigs, the escalation of the Vietnam War, Watergate, the Space Shuttle *Challenger* explosion, and many other high-profile disasters? All are historical or recent real world possible examples of faulty decision making, which may reflect a group dynamic phenomenon, known as groupthink.

The Penguin Dictionary of Psychology defines groupthink as "group decision making procedures, with the tendency for the various members of a group to try to achieve consensus. The need for agreement takes priority over the motivation to try to obtain accurate knowledge to make appropriate decisions. This tendency has been suggested as being one of the prime reasons why politicians operating in closed groups so often make disastrous decisions" (Reber 1995).

Twenty-five years ago, Irving Janis, professor of psychology at Yale University, first presented his theory of groupthink. Janis introduced the term "groupthink" to refer to "a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members striving for unanimity override their motivation to realistically appraise alternative courses of action" (Janis 1972, 8). Cohesiveness in a group usually occurs in the performing stage, which is stage four of team growth. The

first three stages of team growth are forming, storming, and norming, and are a natural part of team formation. The performing stage is evidenced by the fact that the team has settled its relationships and expectations of each other and is willing to accept each other's strengths and weaknesses (Scholtes 1992, 6-4). The problem does not arise when there is group consensus on a decision; in fact, many would argue that consensus is preferable. However, it does become a problem when consensus seeking occurs before the best solution has been identified. Members of the group can become so determined to arrive at a unanimous decision that they do not evaluate the advantages and disadvantages of the proposed solution (Flippen 1999, 139). Groupthink should not be thought of as an outcome, but rather as a process; it does not always result in poor decision making.

Janis' theory has been used numerous times to explain historical tragedies, miscalculations, and fiascoes such as Watergate, the invasion of Cuba at the Bay of Pigs, the escalation of the Vietnam War, and the Space Shuttle *Challenger* explosion. In each of these monumental events, a decision, resulting in disaster, was made that none of the individual members would have made on his own. Janis based his theory primarily on his analysis of the historical data surrounding certain historical events. Janis pinpointed eight symptoms of groupthink:

1. Illusion of invulnerability

2. Belief in the inherent morality of the group

3. Collective rationalization

4. Stereotypes of out-groups

5. Self-censorship

6. Illusion of unanimity

7. Direct pressure on dissenters

8. Self-appointed mindguards (1982, 174-175)

Dr. Gregory Moorhead, an associate professor of management at Arizona State University and an author of many articles on groupthink, in his article "Group Decision Fiascoes Continue: Space Shuttle *Challenger* and a Revised Groupthink Framework," proposes two variables which can moderate or exacerbate group characteristics and groupthink symptoms. The first is time. Moorhead suggests that if the groups involved in fiascoes had more time to decide, maybe they would have consulted others and considered more options. The second variable is leadership style. Moorhead gives an example of President Kennedy's handling of the Bay of Pigs invasion and the Cuban Missile Crisis. In the former example a bad decision was made (which Moorhead attributes to groupthink). In the latter, President Kennedy and his advisors were able to forestall a negative outcome. According to Moorhead, the only changes between these two situations was the leadership style of President Kennedy (1999, 539-550).

A high group cohesiveness and conformity is considered to be a crucial aspect of groupthink occurrence. When one is in a cohesive group, the pressure to conform is much higher, which can lead to a fear of introducing an alternative to the course of action already presented. In addition to high cohesiveness, Janis identified several antecedent conditions that cause groupthink. These antecedents include a lack of impartial leadership, homogeneous backgrounds and values of the individual members, insulation of the group, and a low self-efficacy of group members. These antecedent factors are then

classified into two categories: "structural faults of the organization and provocative situational contexts" (Park 1990, 229).

Annette Flippen, a doctor of industrial and organizational psychology at New York University who wrote an article on groupthink in *Small Group Research,* applies the self-regulatory model to groupthink by stating: "The key to understanding an individual's behavior is understanding what is the goal toward which they are striving and the feedback they are receiving about their progress" (1999, 143). This concept further leads to questions about what motivates the group members to partake in groupthink and about whether or not they fail to express their beliefs out of fear of being perceived as deviant. It is vital to understand what factors can lead to groupthink, the effects of such factors, and possible interventions designed to prevent the potentially catastrophic results of groupthink. Some suggestions include taking measures that ensure each group member has access to all vital information and that leaders should encourage open discussion as well as the expression of personal views (Flippen 1999, 158). The dynamics of groupthink is pictured in figure 1.
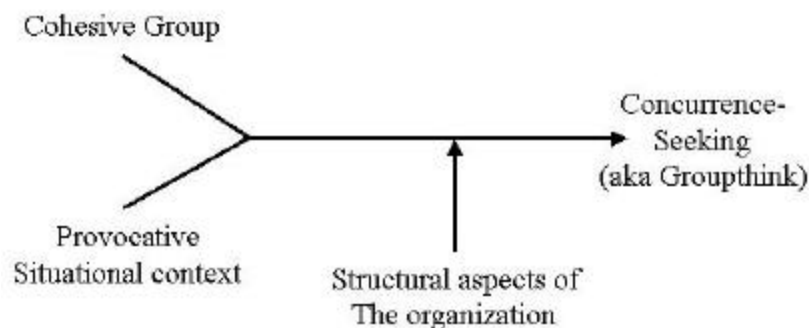

Figure 1. Groupthink Dynamics. *Source*: Hart 1990, 9.

It is clearly evident (after the fact) that the commanding officer and crew of the USS *Greeneville* made a faulty decision in deciding to conduct the emergency blow maneuver when and where they did. Based on articles, interviews, and the U.S. Navy Court of Inquiry, it appears that the phenomenon known as groupthink may have been present and potentially a key environmental reason for the poor decisions made that day. The mere fact that the USS *Greeneville* ignored some Navy standard operating procedures (SOP) during her preparation to conduct the emergency blow maneuver (U.S. Navy Court of Inquiry into the circumstances surrounding the collision between the USS *Greeneville* (SSN 772) and Japanese M/V *Ehime Maru* that occurred off the coast of Oahu, Hawaii, on 9 February 2001, 2001, p. 103), and subsequently collided with the *Ehime Maru*, speaks to the possibility that the phenomenon known as groupthink may have been present. This thesis will explore this issue.

Scope

Both the thesis topic and the primary question have been purposely stated as vaguely as possible to ensure an accurate and full investigation and research of this tragic accident. One could look solely at the transcripts from the U.S. Navy Court of Inquiry and come to one conclusion. One could also just look at the many public newspaper articles, television interviews, and Navy public affairs releases and come up with another conclusion. The scope of this paper will maintain objectivity by using the sources listed above and comparing their results with the established theories, results, and recommendations developed over the past thirty years.

<u>The Research Question</u>

The primary question related to the topic of this thesis is: Was the group dynamic phenomenon known as groupthink present on board the USS *Greeneville* when she collided with the Japanese fishing vessel *Ehime Maru*?

In order to answer this question and, therefore, the thesis statement, the research question must be broken down into a series of subordinate (secondary) questions. The questions that flow from the primary question are as follows:

1. Was there an illusion of invulnerability on board the USS *Greeneville* due to its stellar reputation as a crew and the excellent reputation of their leader? Did the crew of the *Greeneville* operate on the feeling that everything will be just right because it was a special group? Perhaps this example from a popular science fiction movie will illustrate the point. In the movie, the leader of an alien race is killed; all of his followers will yield. While they were a group, they felt and acted as though they were invulnerable; however, once the leader was not present they collapsed (Dick 2001, 1).

2. Was there a tendency to rationalize behaviors on board the *Greeneville*? Rationalization is a very human response, everybody engages in it. It is necessary for all to feel what they are doing is wise, that they are respectful and respectable upright people. What happens in a group is that when a group is converging on a given course of action it begins to pool its sources and collectively begin to evolve certain rationalizations that all members share (Baylor 2001, 1).

3. Was there a belief of morality in the group? Individuals and groups like to believe that their goals and behavior are good and that they serve a noble purpose. This

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is especially true of professional groups (i.e., engineers, physicians, military organizations, etc.). The military is commonly referred to as heroes in American culture.

4. Was shared stereotyping present amongst key players on board the *Greeneville*? When dealing with important decisions, there is usually an increase in stress amongst the group. This can lead to an increase in the "we feeling" of solidarity within the group. If the incompleteness of the group's stereotypes are recognized and controlled, then little harm can come from them. However, they can become dangerous when the group deludes itself into believing that they really know best and when they cease to search for new knowledge and relationships with others.

5. Was pressure applied to nonconformers or out-of-the-box thinkers of the crew? When someone rarely speaks out in a highly cohesive group concerning his doubts, direct pressure is applied to the dissenter. It is made clear to the member exhibiting deviant behavior that what the person is saying is not acceptable to the group as a whole.

6. Did key decision makers and information gatherers consciously or unconsciously self-censor themselves? People who feel the need to conform will censor their own ideas. This may be done by simply withholding their own ideas from the group or by presenting their own views or ideas in a nonthreatening or agreeable manner.

7. Did the crew develop an illusion of unanimity? When people censor their ideas and the goal is to preserve group harmony, the illusion is often that everyone agrees on the issue at hand. No one wants to break the unanimity, so they remain silent about their doubts. The decision by President Kennedy to listen to his group's decision to support an invasion of Cuba led to the "Bay of Pigs" fiasco.

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8. Was "mind guarding" present on board the USS *Greeneville*? The mind guard protects either or both the leader and the group from disturbing or potential negative ideas and information. Opinions and information that contradict the group's decision or mission are withheld from the group.

9. Did the presence of the sixteen civilian riders subconsciously cause the crew to slip into a groupthink mode based on their CO's reputation and displayed competency?

10. Was the CO's leadership style such that he encouraged crewmembers to challenge and push each other, including himself, for the purpose of enhancing each other's critical thinking? An open, active leader without a preferred solution will be able to manage groups without groupthink, while an opinionated leader will tend to pull the group towards that process.

11. Did time constraints serve as a contributor to the poor decision making on the *Greeneville*?

12. What was the level of cohesiveness for the *Greeneville* crew during the timeframe Commander Waddle was the CO?

In researching this subject it is intended not only to ascertain the presence or nonpresence of groupthink on board the USS *Greeneville* when she collided with the *Ehime Maru* but also to give valuable first-hand Navy examples of groupthink possibly being exhibited. By doing this it is hoped that this paper will provide leaders with the ability to recognize and neutralize groupthink.

In the expected absence of firsthand evidence, as no direct research will be conducted, the weight of collected, analyzed, and assimilated information within the defined criteria will either substantiate or refute the idea that groupthink was present and

a contributor in the USS *Greeneville's* accident with the *Ehime Maru* on 9 February 2001.

<u>Significance of the Study</u>

The author considers this study significant because poor decisions made by military leaders needlessly put the lives of America's sons and daughters in harms way. The commanding officer on all U.S. Navy vessels has been reposed with special trust and confidence in his authority to operate his vessel. Along with his special trust and confidence comes the requirement that he be always alert, on station, knowing and training his crew, exhibiting vigilance, and being aware of all things that are going on in his vessel. A CO should always be training his crew and aware of shortcomings and when recognized take all steps to correct them. A U.S. Navy ship is a very dangerous place in which to work in peacetime, let alone in times of war. Because of this, the CO must always be on guard and as such, is personally held responsible for all things that happen on his vessel.

Commanders usually rely heavily on their crew to assist in planning current and future operations and evolutions. Planning for and controlling military operations are primarily accomplished in a group decision-making environment consisting of the commander and his crew. If groupthink is occurring it could be one factor contributing to poor decision-making processes and their associated outcomes.

A good leader (military or civilian) must be able to recognize if his crew has become so consumed with the group that maintaining group cohesiveness and doing what is important for the group overrides their ability to think independently and creatively and

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make good, sound judgments. All leaders must be able to prevent the occurrence of groupthink within their organizations.

Groupthink occurring unchecked during tactical and operational naval operations is unacceptable and could lead to less than desirable outcomes. Because of this one would assume that Navy leadership training would at a minimum address the causes, effects, and ways to ensure groupthink does not occur. This is not the case. The significance of this paper will be felt by naval commanders who read about and fully understand the groupthink phenomenon.

<center>Assumptions</center>

There are several assumptions made while researching this thesis:

The primary assumption is that the Janis theory on groupthink is valid; therefore, it will be used as the standard in answering questions and reaching a final decision. Although there are a good many psychologists and sociologists who question the validity of Janis' theory due to a lack of a quantitative and qualitative controlled experimentation, his theory is still the most widely accepted in the field. This thesis will not address the validity or nonvalidity of Janis' theory or any of the theory's detractors.

The author assumes that Commander Scott Waddle, CO of the USS *Greeneville,* was in full control of his faculties and was not under any unusual or unknown psychological trauma on 9 February 2001.

The author assumes that the CO of the USS *Greeneville* and his crew were operating under legal and binding naval orders when they departed port on the morning of 9 February 2001.

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The author assumes that the U.S. Navy Court of Inquiry dated 12 May 2001 is accurate and was conducted in accordance with standing Department of Defense (DOD) and U.S. Navy Directives and Instructions.

It is an assumption based upon international maritime law that a submarine is always the give way vessel and it is incumbent upon the submarine to stay out of a surface vessels way.

The author assumes that The Navy Court of Inquiry's finding that established no fault of the accident was borne by the *Ehime Maru* is accurate.

Limitations

In order to answer the primary question successfully and keep the study within reasonable limits, certain limitations were set for this thesis.

No additional surveys or interviews will be conducted during this research. Due to the time factor since the accident, normal crew rotation, and the conclusion of the Navy Court of Inquiry, new surveys and interviews will not be conducted. To accomplish this essential aspect of the research interviews already conducted by writers, investigators, and lawyers, as well as the full transcripts of the Court of Inquiry, will provide the only first person look into the submarine and her crew on 9 February 2001 when the faulty decision was made.

The research will not analyze past examples of groupthink but will utilize them in total to support or refute the primary question. It is intended that the past historical examples will offer insight into how group dynamics and groupthink can bring about disaster, as well as offer the necessary knowledge to recognize and prevent the occurrence of groupthink in their individual environments.

Although this example is military in nature and most historical examples are government related, it is not intended to delegitimize the applicability to groups in all facets of modern-day society.

Delimitations

The author does not expect any new information regarding the USS *Greeneville* accident to become available during the course of this research, so it is imperative that exhaustive reading, research, and careful and thoughtful analysis be undertaken.

This thesis will not make any comment or opinion about the Navy Court of Inquiry's findings, the appropriateness or nonappropriateness of Commander Waddle's actions, or the punishment that was received by Commander Waddle and other crewmembers.

This thesis will not make any determination as to the policies and practices of the Commander's, Submarine Force, U.S. Pacific Fleet, implementation of the Distinguished Visitor Embarkation (DVE) Program or the potential negative aspects the sixteen civilian passengers on board the USS *Greeneville* had on the events of 9 February.

Key Terms and Definitions

Psychological and sociological studies and terms are often open to interpretation and mean different things to different people. Therefore, it is important to define key terms that will be used throughout the paper:

Cohesion refers to the attraction groups of people have to relate, to maintain group membership, and to be identified as a group. It is desirable for teams to build rapid cohesion because it tends to unify and align efforts, enable group pressure for sanctioning

deviance, and increase team esprit de corps. Teams that have high cohesion also tend to develop strong culture and norms, have high morale and satisfaction, are loyal and committed, and are productive.

Conformity is generally defined as the attraction of members to the group, or motivation to remain in a group. It also refers to the parameters of behavior that are expected and considered as acceptable or unacceptable. Groups can have a strong effect on influencing conformity within itself.

Deviant behavior is behavior which represents a personally discreditable departure from a group's norms, that when recognized or discovered, elicits reactions from others which are designed to remove, rehabilitate, or punish the person exhibiting this behavior. Deviance as it is used in sociology does not mean evil, bad, rare, abnormal, and unnatural and is not seen as a state of being (it is an action or behavior). "An extreme example would be that although failing to obey the law in Hitler's Germany would be the ethical and right thing to do; it would still be classified as deviant behavior" (Oregonvos 2001, 1).

Informal control relies on the strong influence of peer groups, families, friends, coworkers, or other groups. These groups exert a strong pressure on people. The mechanism employed here is the fear of rejection, shame, or loss of esteem and honor in the eyes of the people one cares about.

The *Navy Court of Inquiry* (NCOI) is not a trial, but a fact-finding body similar to a grand jury in civilian courts. Recommendations regarding nonjudicial punishment or court-martial are usually part of the Court of Inquiries findings.

The DOD and Navy directives, policy, and instructions for the purpose of this thesis are policy actions signed by the Secretary of Defense (SECDEF) or Secretary of the Navy (SECNAV) or their authorized subordinate to ensure sound operating procedures and guidelines within the United States military.

Summary

The term groupthink parallels the ominous expression doublethink in George Orwell's novel *1984*. Groupthink can and often does lead to a number of dysfunctional group behaviors and processes whereby members of the group can fail to adequately look at alternatives or assess the risks associated with decisions, as well as select and use only information that supports their position. When this occurs, the consequences are predictable.

It is imperative to note that, although the consequences are severe when world leaders succumb to groupthink, groupthink is not only limited to world leaders. The mistakes may be more costly to a nation as a whole, and the consequences more magnified. However, all organizations can be victims of groupthink, including military organizations.

Hopefully, the research question will be answered openly and honestly. By doing so, other leaders will be able to benefit from the research by becoming more aware of groupthink, what causes it, and, most importantly, what can be done to ensure groupthink does not exist in their group, crew, organization, or company.

After reading this thesis it is hoped that the reader will not let happen what is graphically illustrated in the cartoon shown in figure 2.
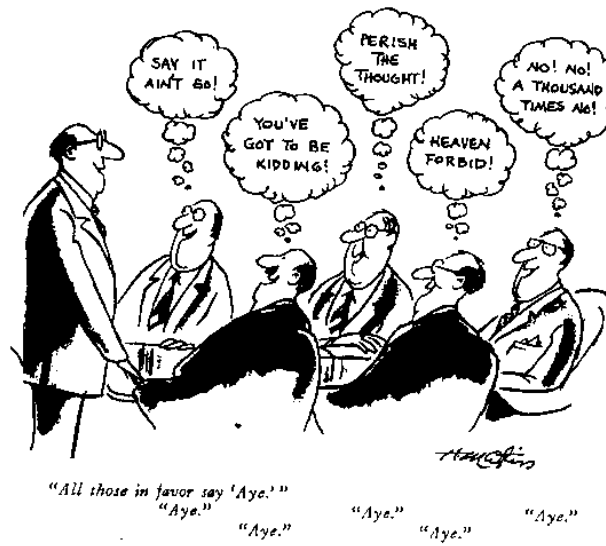
Figure 2. Cartoon. *Source*: David G. Myers, 1996, 339.

CHAPTER 2

LITERATURE REVIEW

The only sin we never forgive each other is difference of opinion.
(Heartquotes 2002, 1)

Ralph Waldo Emerson

<u>Background</u>

During the research of this thesis, numerous articles, books, and theories

presented themselves to the writer. It was evident very early on that the direction for the

thesis was unique and might be the only U.S. military organizational unit study on

groupthink ever accomplished, as this research revealed no previous work. Numerous

government fiascoes (Janis 1972-1982) and poor decision-making scenarios have been

written about and studied, but no military specific studies on groupthink were revealed

during the research. This raised concerns as to whether there would be enough specific

research available to answer the thesis question, Was the group dynamic phenomenon

known as groupthink present on board the USS *Greeneville* when she collided with the

Ehime Maru? A large amount of literature, studies, and theory analysis came from the

World Wide Web and contributed greatly to the final product.

This thesis is a social research project focusing on group dynamics and

groupthink. The literary research for this thesis was conducted in four stages. The first

was a review of the accepted theoretical models by Janis, Moorhead, and Hart, all

recognized and published experts in the field of group dynamics as they relate to small-

group decision making, groupthink, the faulty decisions that group cohesion can lead to,

and methods to ensure that groupthink and faulty decisions are avoided.

Next was a review of all available data on the USS *Greeneville* collision with the

Ehime Maru, to include periodical articles and their associated interviews with the crew,

the commanding officer, and others associated with the tragedy. Additionally, the entire

legal proceeding known as a Navy Court of Inquiry was reviewed and analyzed. This

part of the review also contained a "lessons learned" analysis comparing significant

historical events and fiascoes, which were analyzed in relation to groupthink. These

events included a review of the Bay of Pigs, Watergate, and the Space Shuttle *Challenger*

to name a few. Specifics of these events were used in parallel to analyze the events on

the USS *Greeneville.*

The third section reviewed research on naval military leadership (specifically as it

applies to the submarine community), its premise, how it is taught and role modeled, and

its effectiveness on its own junior officers.

The fourth part was a critical comparison between the theory of groupthink; its

elements and patterns, theoretical examples, results, and solutions versus the evidence

uncovered during parts two and part three; the actual environment on board the USS

Greeneville prior to the faulty decision; and the influence of military leadership that is

taught, practiced, and role modeled throughout an officer's career. All of these parts will

be analyzed against each other to determine whether groupthink was indeed present on

board the USS *Greeneville* when she collided with the *Ehime Maru.* resulting in its

sinking and the deaths of nine Japanese nationals.

Current Literature

General Groupthink Theory

There is a great deal of information, theory, case studies, and research on the subject of groupthink. Although much work has been done on this issue, there is not an abundance of sources available that directly analyzes military tragedies and disasters and the presence of groupthink; however, a great deal of information does exist with regards to government episodes and groupthink. Specifically, there has been a tremendous amount of research and analysis on the Kennedy administration's handling of the Bay of Pigs incident and National Aeronautical and Space Administration's (NASA) interactions with Morton Thiokol in the preceding hours before the Space Shuttle *Challenger* disaster.

Irving Janis' theory, addressed in his book *Victims of Groupthink*, published in 1972, remains the basic foundation for all study and research of the phenomenon known as groupthink. Janis followed up this work in 1982 with his second book on the subject entitled, *Groupthink: Psychological Studies of Policy Decisions and Fiascoes*. Although there is an abundance of material on groupthink, Janis' theories and publications are the original guide on the subject and will be refrerred to throughout this thesis. There are literally hundreds of studies, papers, and periodical articles which address groupthink. There is also a very good training film about the Space Shuttle *Challenger* disaster, which breaks down the decision-making process piece by piece and shows in a dramatic fashion how groupthink is caused and, most importantly, how it is allowed to happen without anyone realizing it. This will be detailed later in the chapter. Some of the more respected authors on the subject and their articles are Gregory Moorhead and his article, "An Empirical Investigation of the Groupthink Penomenon." Also Paul t'Hart's article

"Preventing Groupthink Revisited: Evaluating and Reforming Groups in Government,"
and Charles Manz' "The Potential for Groupthink in Autonomous Work Groups." These
books, papers, and individual works were valuable references utilized in the writing of
this thesis.

The availability of naval leadership publications and theory are prevelant and
widely available. One specific book used was *Lead On*, by retired Rear Admiral Dave
Oliver Jr. Admiral Oliver served around the world on all types of submarines, from a
diesel submarine to the first nuclear attack boat, as well as a ballistic missile submarine.
His book touches on his experiences with what he calls "some of the best and worst"
leaders during his thirty-year Navy career. Additionally, the official records and
transcripts of the entire Navy Court of Inquiry, which includes interviews, court
proceedings, and many other legal documents, were utilized and will be discussed later in
this chapter.

<div align="center">Specific Literature Review</div>

Groupthink and Victims of Groupthink

Irving Janis, who is the primary philosopher of groupthink theory and Professor
Emeritus of Psychology at Yale, published two books on the subject. The first, titled
Victims of Groupthink, was published in 1972. The second book, titled *Groupthink:
Psychological Studies of Policy Decisions and Fiascoes,* was published in 1982. Irving
Janis' *Victims of Groupthink* is an analysis of decision-making fiascoes in foreign policy
and defines groupthink as a psychological drive for consensus at any cost. It is a drive
that suppresses dissent and appraisal of alternatives in cohesive decision making. His
theory is based on the assumption that "the chances for successful outcomes resulting

from decisions reached by poor decision-making procedures are very low" (Moorhead 1982, 431). Janis' conclusions are based on an historical analysis of the decision-making activities of governmental policy-making groups that produced either major calamities or remarkable successes. At the time his conclusions represented a major departure from conventional concepts of performance that are expected of highly cohesive groups (430). Janis' theory of groupthink is still accepted today as a unique phenomenon that can be utilized to explain why certain decisions are made.

The case studies that Janis provided included discussions on the fateful decisions of the advisory group that led Admiral Kimmel to the decision that decreased conditions of readiness immediately prior to the infamous surprise attack by the Japanese at Pearl Harbor on 7 December 1941; the inner workings of the presidential advisory group that supported President Kennedy's decision to proceed with the ill-fated Bay of Pigs invasion; the Truman advisory group that perceived that North Korea could be invaded without risk of the Chinese being drawn into the Korean War; and the "Tuesday Lunch Group" that advised President Johnson that the increased bombing of North Vietnam would break the ties that bound the United States into the Vietnam conflict. Studies of the development of the Marshall Plan and the handling of the Cuban Missile Crisis are presented as examples of effective decision making. *Groupthink*, published in 1982, further details the events that affected the Nixon advisory group that ultimately designed and executed the cover-up of the Watergate break in (Janis 1982, iv-viii).

One common characteristic of all of these groups was their vulnerability to groupthink. Janis defines groupthink as "a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for

unanimity override their motivation to realistically appraise alternative courses of action"
(Janis 1982, 9).

The groupthink model (see figure 3) provides a visual representation of the theory
of groupthink, including the conditions under which groupthink is likely to occur, the
symptoms of groupthink, and the consequences resulting from groupthink. According to
the model the antecedent condition of a moderately or highly cohesive group (Box A)
interacts with other structural faults of the organization (Box B-1) and or provocative
situational context factors (Box B-2) to increase the probability of the groupthink
tendency. The groupthink tendency is expressed in the observable consequences of the
symptoms of groupthink (Box C). When a group displays most of the symptoms of
groupthink, we can expect to find that the group will also display symptoms of defective
decision making (Box D) (Janis 1982, 175). Defective decision making normally lowers
the probability of a successful decision outcome (Box E). "The theory predicts that when
a group is moderately or highly cohesive (Box A), the more of the antecedent conditions
listed in boxes B-1 and B-2 that are present, the greater the chances of defective decision
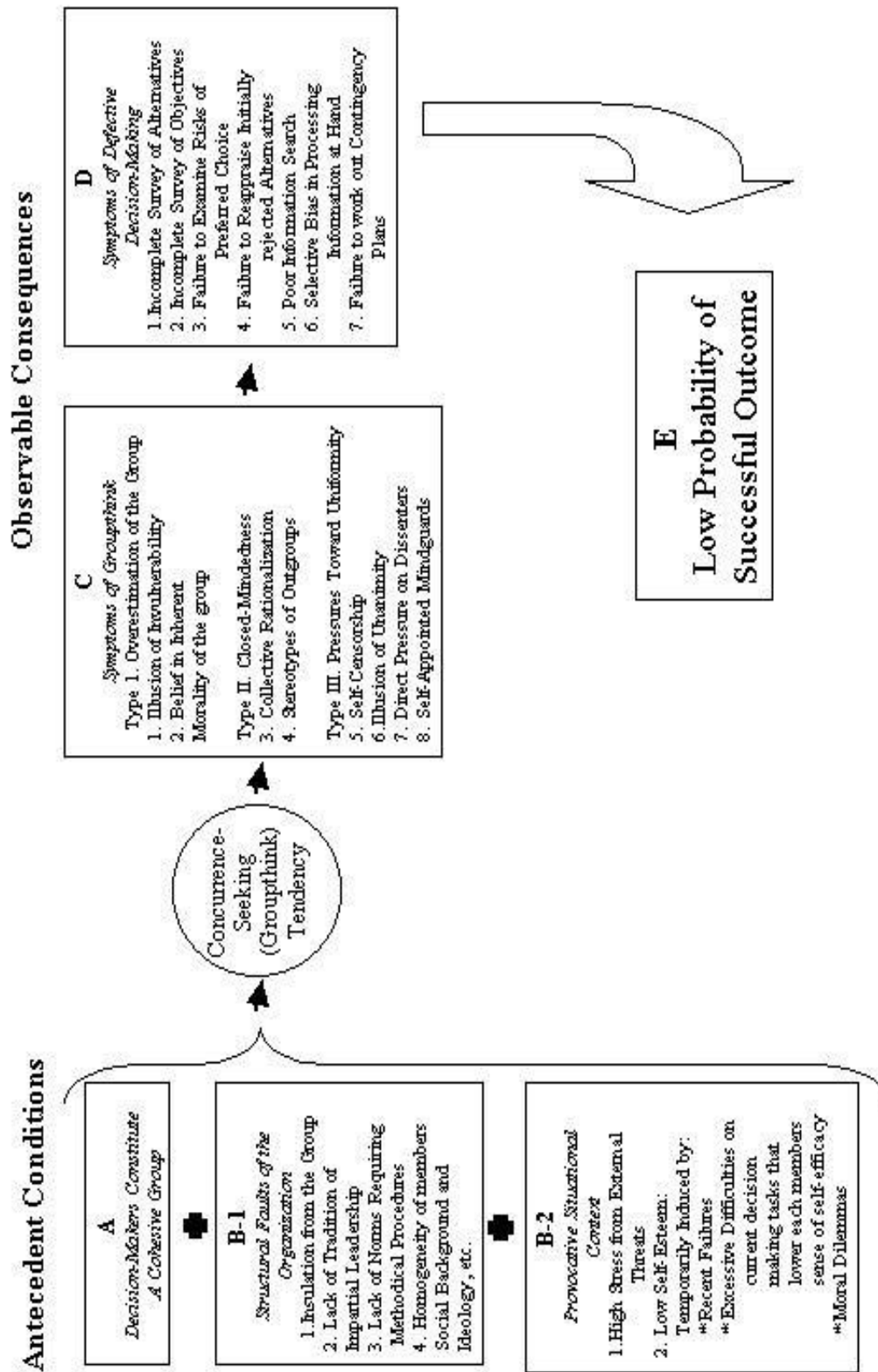making as a result of the groupthink syndrome" (Janis 1982, 245).

Observable Consequences

Antecedent Conditions

A
Decision-Makers Constitute A Cohesive Group

B-1
Structural Faults of the Organization
1. Insulation from the Group
2. Lack of Tradition of Impartial Leadership
3. Lack of Norms Requiring Methodical Procedures
4. Homogeneity of members Social Background and Ideology, etc.

B-2
Provocative Situational Context
1. High Stress from External Threats
2. Low Self-Esteem: Temporarily Induced by:
   *Recent Failures
   *Excessive Difficulties on current decision making tasks that lower each members sense of self-efficacy
   *Moral Dilemmas

Concurrence-Seeking (Groupthink) Tendency

C
Symptoms of Groupthink
Type I. Overestimation of the Group
1. Illusion of Invulnerability
2. Belief in Inherent Morality of the group

Type II. Closed-Mindedness
3. Collective Rationalisation
4. Stereotypes of Outgroups

Type III. Pressures Toward Uniformity
5. Self-Censorship
6. Illusion of Unanimity
7. Direct Pressure on Dissenters
8. Self-Appointed Mindguards

D
Symptoms of Defective Decision-Making
1. Incomplete Survey of Alternatives
2. Incomplete Survey of Objectives
3. Failure to Examine Risks of Preferred Choice
4. Failure to Reappraise Initially rejected Alternatives
5. Poor Information Search
6. Selective Bias in Processing Information at Hand
7. Failure to work out Contingency Plans

E
Low Probability of Successful Outcome

Figure 3. The Groupthink Model: *Source*: Janis 1982, 244

The model presents three types of groupthink symptoms described here in outline form.

TYPE I: Overestimation of the Group

1. Illusion of Invulnerability. This symptom is defined as excessive optimism that encourages taking extreme risks with little consideration of what would happen if the worst outcome should occur or the consequences of the solution proposed by the group. This always includes the overestimation of the potential success of the solution or the abilities of the group.

2. Belief in the Inherent Morality of the Group. This symptom implies that the group ignores the ethical or moral consequences of their decisions.

TYPE II: Close Mindedness

3. Collective Rationalization. This is an effort by members of the group to discount, withhold, or distort warnings and other information that could threaten the group's belief by convincing themselves as to the validity of the group's position. The group does not realistically or seriously consider outside information or other potential decision alternatives.

4. Stereotypes of Out-Groups. "Just as the groups are overconfident in their own powers and morality, they tend to believe their opponents are weak or foolish" (Baron 1998, 282). This results in an underestimation of their opponent's ability to counter or interfere with the group's plan.

TYPE III: Pressures Toward Uniformity

5. Self-Censorship. This occurs when members hold back expressing their doubts or

   deviations from the apparent group consensus. This may reflect each member's

   inclination to minimize to himself the importance of his doubts and counterarguments

   (Janis 1982, 175).

6. Illusion of Unanimity. Self-censorship and other devices create an environment of

   unanimity concerning judgments conforming to the majority view. This environment

   is also facilitated by the false assumption that silence means consent.

7. Direct Pressures on Dissenters. The group uses direct social pressure on any members

   who express dissent with the majority's views, stereotypes, proposed solution, or

   commitment. Group pressures and norms make it clear that dissenting viewpoints and

   behavior are contrary to expected group norms of loyalty.

8. Self-Appointed Mind-Guards. Members of the group take it upon themselves to

   protect the group from adverse information that could threaten the group's shared

   complacency and to keep others in line with the supposed consensus (Janis 1982,

   174-175).

   Janis' theory goes farther and states, "Whenever a group displays most of the

symptoms of groupthink, [you] can expect to find that the group displays symptoms of

defective decision making." Janis identified seven symptoms based on his research on

decision making in government, industry, and other large organizations. They are:

   1. Incomplete survey of alternatives

   2. Incomplete survey of objectives

   3. Failure to examine risks of preferred choice

4. Failure to reappraise initially rejected alternatives

5. Poor information search

6. Selective bias in processing information at hand

7. Failure to work out contingency plans (Janis 1982, 175)

Gregory Moorhead, a professor of management at Arizona State University and a recognized expert on groupthink, writes in his 1982 article "Groupthink: A Hypothesis in Need of Testing," "The occurrence of groupthink is dependent on situational factors and structural features of the group. The primary condition necessary for groupthink is a highly cohesive group. Secondary conditions conducive to groupthink are the insulation of the group from outsiders (often for security reasons) and the presence of an active leader promoting his or her own preferred solution" (432).

In addition to high levels of cohesiveness in a group, Janis claims that when the leader of such a group promotes his or her own preferred solution, "The greater are the chances of a consensus based on groupthink, even when the leader does not want the members to be yes men and the individual members try to resist conforming" (Janis 1972, 197; Gaskins 1988, 6-8).

As to the question of who is susceptible to groupthink, Janis (1982) adopts the assumption that all policy makers are vulnerable, irrespective of their personality characteristics and predispositions. The situation, not the person, is the determinant of the groupthink syndrome. Consequently, Janis argues that groupthink cuts across national boundaries and economic sectors. It is not just an American or government phenomenon.

One of the most intriguing and informative cases Janis (1972 and 1982) writes about pertains to President Kennedy's Bay of Pigs invasion. The events of that case unfolded on 17 April 1961, when 1,400 Cuban exiles, aided by the United States, invaded Cuba at the Bay of Pigs. Nothing went as planned, Castro captured most of the exiles, and the United States was accused of aggression. Kennedy later wrote, "How could I have been so stupid to let them go ahead?" (Janis 1982, 16). Janis' analysis of this fiasco revealed that it was partially caused by groupthink. All the antecedents and symptoms were present: high cohesion, lack of impartial leadership, and stress caused Kennedy's advisory group to seek concurrence at the expense of prudent decision making. This concurrence seeking manifested itself in many symptoms, such as overconfidence and suppression of doubts (Mohamed and Wiebe 1996, 420).

<u>Beyond Groupthink</u>

Another book utilized in the writing of this thesis was Paul 't Hart's *Beyond Groupthink,* in which he writes about the refinement of the decision-making approach to foreign policy analysis. Following in Janis' footsteps, he refocuses attention on the importance of small elite groups at crucial junctures in the foreign policy process. Moving beyond Janis' work on groupthink, he presents a range of questions, conceptual frameworks, and empirical explorations that should enable the reader to understand more fully the different functions that small groups perform in the policy process. Hart combines a respectful yet critical assessment of twenty-five years of groupthink-dominated small-group research in foreign policy (Hart 1997, 29).

The Logic of Failure

Here Dietrich Dormer (1996) systematically and logically diagnoses the process

of why individuals fail. Dormer provides snippets of computer situations and how two

individuals fail to resolve problems. He presents psychological reasons in blunt terms

why they failed. He establishes the path to failure in rather stark and almost fatalistic

terms. It is as if all are doomed to fail, unless they heed the correct procedure to problem

solving.

Navy Court of Inquiry

Captain Michael Hinkley, Pacific Fleet Judge Advocate explained,

The Court of Inquiry is an administrative fact-finding process, a formal board of
investigation, and its charter is to examine the facts and circumstances
surrounding the collision and to come up with findings of fact, opinions and
recommendations. . . . We have had Courts of Inquiry since 1786 based upon
Articles of War. Currently, the legal basis is under Article 135 of the Uniform
Code of Military Justice. Any officer, who can convene a General Court Martial,
has the authority to convene this Court of Inquiry, the administrative fact-finding
investigation. Generally, it is used for major incidents, and that is a term that is
defined under our manual. It is generally an extraordinary incident occurring
during the course of official duties resulting in multiple deaths, substantial
property loss or substantial harm to the environment, where the circumstances
suggest a significant departure from the expected level of professionalism,
leadership, judgment, communication, state of material readiness or other
standard. (2001)

Admiral Thomas Fargo, Commander in Chief, U.S. Pacific Fleet appointed a

"Court of Inquiry [to look] into the circumstances surrounding the collision between the

USS *Greeneville* (SSN 772) and Japanese M/V *Ehime Maru* that occurred off of the coast

of Oahu, Hawaii on 9 February 2001" (Navy Court of Inquiry (NCOI), 2001, Exhibit A,

p. 1). The court was directed to inquire into all facts and circumstances connected with

the collision; resulting deaths and injuries to the Japanese passengers and crew; and the damages resulting from and any fault, neglect, or responsibility for the incident.

The Navy Court of Inquiry's documents total over 1,475 pages of interviews, transcripts of testimony, facts, photographs, schematics, and others surrounding events on board the USS *Greeneville*. Included in the final report are findings of fact, opinions, and recommendations, including any recommended administrative or disciplinary actions. These documents were the main source of reliable information that the author utilized while reconstructing events to assist in answering the research question.

<center>Periodicals and Theses</center>

A 1992 article in *Small Group Research* by Marceline B.R. Kroon, David van Kreveld, and Jacob M. Rabbie titled, "Group Versus Individual Decision Making: Effects of Accountability and Gender on Groupthink," raises some very interesting findings that are very applicable to this research. First, this study counters two important antecedent conditions of groupthink: namely, insulation and promotional leadership (or lack of impartial leadership), whereby the leader either knowingly or unknowingly influences the group to accept or support his preferred choice.

Secondly, the original studies of Janis concerned all-male groups (an interesting coincidence is that no historic fiascoes thought to have had groupthink present had any women at all in the groups which made the decision); the question naturally arises whether women and mixed groups are also vulnerable to groupthink. Research on gender stereotyping shows two basic dimensions on which women and men generally are believed to differ. Women are thought to be more concerned with the welfare of other people or relational issues. This dimension is called "warmth expressiveness" or

"communion." Men are associated more with "instrumentality" or "agency," indicating a concern with mastery and control (Deaux 1984, 105-116; Deaux 1985, 49-81; Eagly 1987; Spence, Deaux, and Helmreich 1985, 149-179). In accordance with these gender stereotypes, men are found to be more task oriented than women, and women display more socioemotional behavior (Goldenbeld 1992; Willemsen 1984; Wood, Polek and Aiken 1985, 63-71). The research and associated findings could prove to be clearly valuable due to the gender specific nature of a U.S. Navy submarine and her crew.

Commander Gaskins' 1988 thesis "A Case Study of Small Group Decision-Making as influenced by the Abilene Paradox: The *Challenger* Mishap" provided tremendous insight and valuable data with regards to small-group decision making. His thesis looks at the decision-making process around the events of 27 January 1986 when a highly cohesive group of decision makers representing the public and private sectors in the national space exploration program evaluated the risk associated with known discrepancies in the solid rocket motor seals of the space shuttle *Challenger*.

Another tremendous resource was a monograph by Major Phillip Johnson, United States Army, titled "Effects of Groupthink on Tactical Decision Making." In his monograph he examines how group behaviors influence decision making and ultimately mission outcomes at the tactical level. Specifically, the monograph determines whether groupthink negatively affects decision making at the battalion and brigade level. The underlying proposition of his research is that commanders and staffs that display the symptoms of groupthink are more likely to display symptoms of defective decision making, leading to poor mission outcomes (Johnson 2000, iii).

A 1991 paper published in *Human Relations,* titled "Group Decision Fiascoes Continue: Space Shuttle *Challenger* and a Revised Groupthink Framework" by Gregory Moorhead, Richard Ference, and Chris Neck, provided extremely valuable data and analysis which is quite similar to the study this thesis is investigating.

On 28 January 1986, the space shuttle *Challenger* was launched from Kennedy Space Center. The temperature that morning was in the mid-twenties, well below the previous low temperatures at which the space shuttle engines had been tested. Seventy-three seconds after launch, the *Challenger* exploded, killing all seven astronauts aboard and becoming the worst disaster in space flight history. The catastrophe shocked the nation, crippled the American space program, and will most likely be remembered as the most tragic national event since the assassination of John F. Kennedy in 1963 (Moorhead, Ference, and Neck 1991, 540).

The Presidential Commission that investigated the accident pointed to a flawed decision-making process as a primary contributory cause. The decision was made the night before the launch in the Level I Flight Readiness Review meeting. The paper analyzes the commission's results and determines that there were enough antecedent conditions, symptoms, and decision-making defects to support a conclusion that the decision to launch could be classified as a groupthink situation. In writing their article the three authors proposed two other conditions that may play a role in the development of groupthink. These two variables, time and leadership style, are, therefore, proposed as moderators of the relationship between group characteristics and groupthink symptoms. These two moderators lead to new prescriptions for the prevention of groupthink (Moorhead, Ference, and Neck 1991, 549-550).

Case Studies

Another significant study that proved useful is Solomon Asch's 1965 study on the power of group pressure. Mr. Asch gathered a series of groups of seven or eight subjects together for a purported experiment on visual acuity under varying conditions. In fact, only one individual was a genuine subject. The others were confederates of Asch.

The experiment involved showing a series of sets of three straight lines to the group, adding a fourth line and asking them which line the fourth one was equal to. In all cases, the answer was obvious. The subject was last to answer in each case.

After several trials, where everyone gave the right answer to establish an atmosphere of normality, the confederates started to give answers that were incorrect. The subject, remember, was always last to answer. Despite the fact that the answers now being given by the others were wrong and obviously wrong, 33 percent of the subjects would go along with the group. Peer pressure towards conformity within the group is extremely powerful.

The need to conform or to be accepted by a group is at the basis of the Asch experiments. Some people feel this need more than others (possibly more so in a military environment, where the one person who controls one's promotion is the one to whom one feels the need to conform). Such a need is at the basis of team spirit, teamwork, and the whole nature of the affiliative society (Asch 2002, 1).

It has also been the basis of more dangerous aspects of human life. One might argue that social conformity is necessary for any political movement to survive; there is little doubt that uncritical conformity was the villain in the outbreak of the Nazi party, the escalation of the Vietnam War, Watergate, and many others.

Summary

Within the sphere of the research to answer the question about groupthink's presence on board the USS *Greeneville,* a plethora of information has been revealed. The theoretical books of Janis and Hart provided the groundwork of understanding, potential secondary and third level questions, and a framework as to how to analyze the group environment that fateful day on board the USS *Greeneville*.

The Navy Court of Inquiry provides the only real firsthand account of what actually happened and what was going on in key figures' heads at the time of the accident. The articles, reviews, case studies, and the like provided valuable data and also a potential framework to go about the analysis to reach an answer to the primary question.

When combined, the theories, evidentiary material, articles, reviews, and case studies will all intertwine to allow the author to answer the primary question: Was the group dynamic phenomenon known as groupthink present on board the USS *Greeneville* when she collided with the Japanese training fishing vessel the *Ehime Maru*?

CHAPTER 3

RESEARCH METHODOLOGY

> Certainly a leader needs a clear vision of the organization and
> where it is going, but a vision is of little value unless it is shared in
> a way so as to generate enthusiasm and commitment. Leadership
> and communication are inseparable. (Motivating Quotes 2002, 1)

<div align="right">Claude Taylor</div>

Introduction

This chapter outlines the methodology used to conduct this study of the USS

Greeneville's collision with the Japanese fishing vessel *Ehime Maru* in February 2001. It

explains the method for analyzing psychological and sociological theory with regards to

Janis' groupthink theory and its applicability, either full, partial, or nonexistent to the

events on board the USS *Greeneville* prior to the collision. This chapter reviews the

primary and tertiary questions, as well as provides a detailed explanation of Janis' theory

on groupthink, which will be used as the primary theory to determine the answer to the

primary question.

General

Proving that the events on board the USS *Greeneville* prior to her collision did or

did not have an effect on the decisions made by the commanding officer, officer of the

deck, and others in leadership positions was difficult, considering the limitation of not

being able to conduct primary research. Research for this thesis was limited by the fact

that only certain individuals were interviewed and or testified before the Court of Inquiry.

Additionally, interviews, examinations, and oral testimony do not always get to the

bottom of the matter, as proper and investigative questions are not thoroughly explored. One would hope that the commanding officer of a U.S. Navy nuclear submarine and its crew would follow SOPs and thus make decisions that are safe, good for the country and the crew, and based on sound facts, a dynamic decision-making process, and proven U.S. Navy methods and procedures. Of course, since we are all human and look at things very differently, one must realize that this is not always the case. It is, indeed, difficult to make a decision without one's own perceptions, biases, and experiences entering the decision-making process. Due to these factors, the conclusions at the end of this thesis may not be black and white, as some would like. The conclusion reached will be based on sound logic and analysis of the said events through research utilizing decision matrices, the Navy Court of Inquiry, interviews, articles, and quotes from principal players and others, and their applicability to the Janis theory. The author will attempt to prove or disprove the question as to whether the phenomenon known as groupthink was present on board the USS *Greeneville* during the decision-making process that eventually led to the collision with the *Ehime Maru*.

Description of the Study

The researcher began by making an outline of the primary and tertiary questions and how they fit together. From this point, the researcher focused on those primary and secondary questions and began the research and analysis to eventually arrive at the conclusion. Since high group cohesiveness and conformity is considered to be the crucial aspect of groupthink, a lot of time will be spent analyzing and researching the data to ascertain their presence or lack thereof. Additionally, as stated in chapter 1, Janis identified several antecedent conditions that cause groupthink. These antecedents include

a lack of impartial leadership, homogeneous backgrounds and values of the individual members, insulation of the group, and a low self-efficacy of group members among others. These conditions were researched and analyzed. All of these issues and the associated evidence were used to draw together the strands of information to provide a logical sequence, supported with the available evidence, to illustrate the presence or non-presence of groupthink on board the USS *Greeneville*. This will be explained further in this chapter.

Groupthink Theory

Janis made several statements that could be considered as definitions of groupthink: (1) It is "a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members striving for unanimity override their motivation to realistically appraise alternative courses of action;" (2) "a deterioration of mental efficiency, reality testing, and moral judgment that results from in-group pressures;" and (3) a "concurrence seeking tendency." The basic idea is that small, highly cohesive decision-making groups could unconsciously undermine their basic mission of problem solving in order to preserve the cohesive structure of the group. That is, the human resource maintenance task is favored over the performance task. Such displacement results in the group's failure to follow good decision-making procedures, making success unlikely. Janis argued that groupthink was caused by three antecedents: (1) group cohesiveness; (2) structural faults, such as insulation of the group and lack of impartial leadership; and (3) a provocative situational context characterized by high task stress and temporary low self-esteem and self-efficacy. Although the second and third antecedents are neither necessary nor sufficient (by themselves) to cause groupthink,

group cohesion (see figure 4) is necessary but not sufficient by its presence to prove that groupthink was present (Janis 1982, 9). Further analysis and study must be conducted.
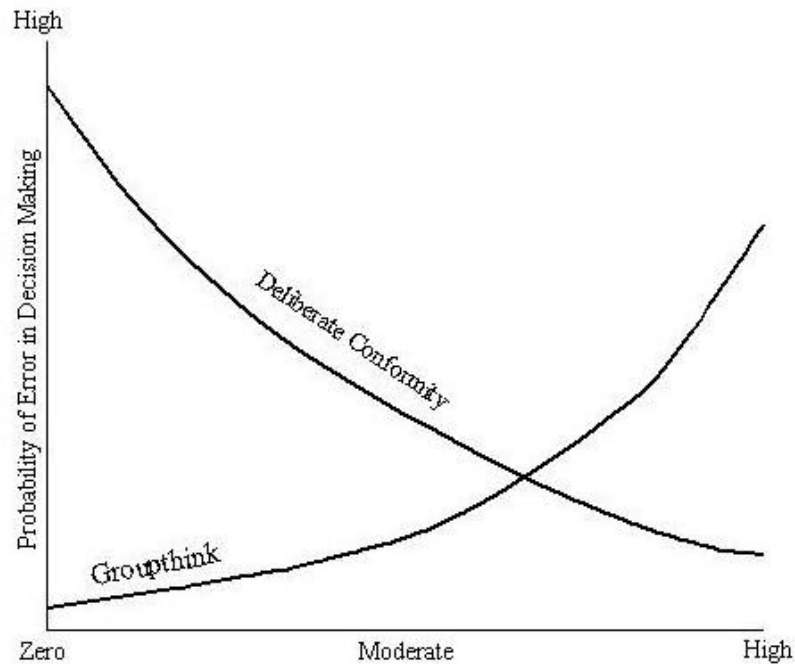

Figure 4. Group Cohesiveness. *Source:* Janis 1982, 237.

Eight symptoms signal the working of the antecedents and the development of groupthink. They are divided into three main categories: (1) overestimation of the group's power and morality; (2) closed mindedness; and (3) pressures toward uniformity. These symptoms include both attitudes and behaviors that have a psychological and social function. Overestimation of the group's abilities and position provides members with confidence that is necessary to dismiss fears and doubts about the group's position. Closed mindedness functions to reinforce whatever negative perspective the group may hold for the out-group or the environment. Pressures toward uniformity guarantee that no

group member(s) will rock the boat by introducing ideas that challenge the group's position. Collectively, these symptoms operate to maintain the "togetherness" feeling and combat the negative effects caused by low self-esteem and low self-efficacy. "When a policy-making group displays most or all of the symptoms in each of the three categories, the members perform their collective tasks ineffectively and are likely to fail to attain their collective objectives as a result of concurrence seeking" (Janis 1982, 175). This is to say that the symptoms of defective decision making, which include: (1) an incomplete survey of objectives; (2) a poor information search; and (3) a selective bias in processing information that has been collected, will result in an expectation that a group will display symptoms of groupthink (Janis 1982, 175).

To provide for the concept's external validity, Janis (1972, 1982) presented several cases that depict cohesive high-status, decision-making groups that fall victim to groupthink and lead to fiascoes. These include the Bay of Pigs fiasco, Admiral Kimmel and his unpreparedness prior to Pearl Harbor, President Truman and his advisors believing the fact that China would not become involved in the Korean War, and President Johnson and his "Tuesday Lunch Group," which believed intensified bombing would drive North Vietnam from the Vietnam War.

The Primary and Tertiary Questions

The primary question to be answered was: Was the group dynamic phenomenon known as groupthink present on board the USS *Greeneville* when she collided with the Japanese fishing vessel *Ehime Maru*?

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In order to answer the primary question and, therefore, the thesis statement the question was broken down into a series of subordinate (secondary) questions. The questions that flow from the primary question are as follows:

1. Was there an illusion of invulnerability on board the USS *Greeneville* due to its stellar reputation as a crew and the excellent reputation of their leader? Did the crew of the *Greeneville* operate on the feeling that everything would be just right because they were a special group?

2. Was there a tendency to rationalize behaviors on board the *Greeneville*?

3. Was there a belief of morality in the group?

4. Was shared stereotyping present amongst key players on board the *Greeneville*?

5. Was pressure applied to nonconformers or out-of-the-box thinkers of the crew?

6. Did key decision makers and information gatherers consciously or unconsciously self-censor themselves?

7. Did the crew develop an illusion of unanimity?

8. Was "mind-guarding" present on board the USS *Greeneville*?

9. Did the presence of the sixteen civilian riders subconsciously cause the crew to slip into a groupthink mode based on their CO's reputation and displayed competency?

10. Was the CO's leadership style such that he encouraged crewmembers to challenge and push each other, including himself, for the purpose of enhancing each other's critical thinking?

11. Did time constraints serve as a contributor to the poor decision making on the *Greeneville*?

12. What was the level of cohesiveness for the *Greeneville* crew during the timeframe Commander Waddle was the CO?

The research method that was followed is graphically represented in figure 5. Since Janis' theory states that cohesiveness must exist for groupthink to exist, cohesiveness represents the first block. If cohesiveness did not exist on the USS *Greeneville* at the time of the accident, then groupthink was not present in any way, shape, or form.
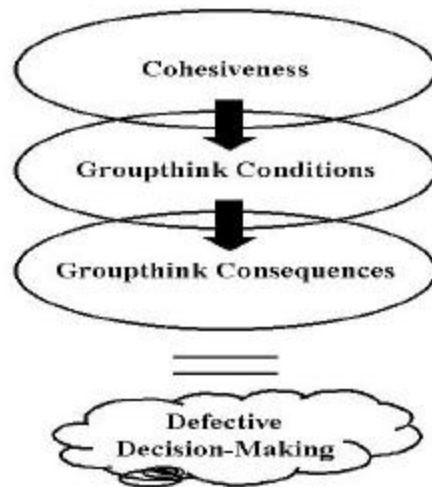

Figure 5. Defective Decision-Making Flowchart

However, if cohesiveness did exist, then research and analysis must ascertain whether certain conditions were present. However, it may be likely through the research and analysis that all groupthink antecedent conditions will not have been present. However, as figure 6 illustrates, all conditions do not have to be present. Janis states that as few as one of the conditions (plus cohesiveness) may be all that needs to exist for groupthink to be present (Janis 1982, 176). The next step was to ascertain what
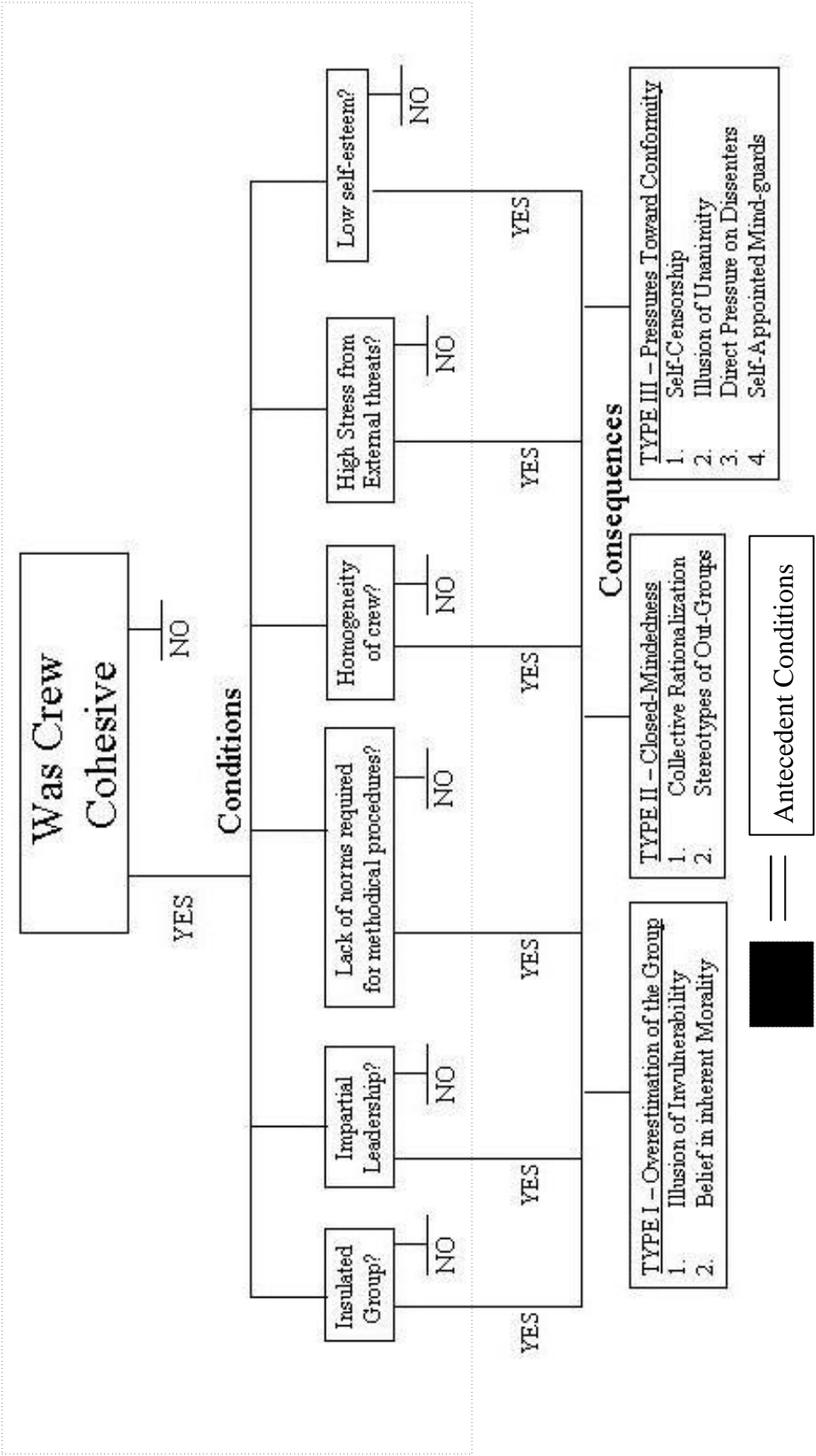
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Figure 6. Groupthink Research Method Flow Chart

observable consequences were present, if any. The consequences noted are reflective of concurrence seeking, or, as Janis described, "the groupthink tendency" (Janis 1982, 244).

Establishing conditions and consequences by themselves is not a simple task. To correctly determine the existence or nonexistence of conditions and consequences an established and consistent method must be followed. The method followed to verify or dismiss the conditions and consequences is represented in table 1. Each secondary question must be answered by verifiable data or, in this case, strongly implied conditions.

The first condition that needs to be verified is cohesion. Cohesion refers to the attraction groups of people have to relate, maintain group membership, and be identified as a group. It is desirable for teams to build rapid cohesion because it tends to unify and align efforts, enable group pressure for sanctioning deviance and increase team esprit de corps. Teams that have high cohesion also tend to develop strong culture and norms, have high morale and satisfaction, are loyal and committed, and are productive.

Cohesion in the crew of a naval submarine develops the same way as in civilian work groups. The crew goes through the stages of forming, storming, norming, and performing. During this period the crew experiences many stages of transition, ranging from excitement and anticipation (forming), resistance to tasks and sharp fluctuations in attitude (storming), acceptance of membership and confidence that things are working out (norming), to satisfaction with the team and a better understanding of the teams strengths and weaknesses (performing) (Scholtes 1992, 6-4--6-7). Research and analysis will determine if the crew was cohesive, and, if so, if it was a healthy or unhealthy level of cohesion. Table 1, which follows at the end of this chapter, identifies the keys to the research method that will be employed to answer the research question.

Once a determination about cohesiveness was reached, the research moved on to the second level or the conditions that existed on the USS *Greeneville*. Through research and analysis, a determination was made on the following conditions:

1. Insulated Group?

2. Impartial Leadership?

3. Lack of norms required for methodical procedures?

4. Homogeneity of crew?

5. High stress from external threats?

6. Low self-esteem?

After determining the presence, or the lack thereof, of the conditions mentioned above, the research and analysis moved to the final stage of determining what consequences were or were not present. These consequences include:

1. Illusion of invulnerability

2. Belief in an inherent morality

3. Collective rationalization

4. Stereotypes of outgroups

5. Self-censorship

6. Illusion of unanimity

7. Direct pressure on dissenters

8. Self-appointed mind guards

Once the research determined whether cohesion was present and determined which conditions and consequences were present, an educated decision could be made as

to the primary question: Was the group dynamic phenomenon known as groupthink present when the USS *Greeneville* collided with the Japanese fishing vessel *Ehime Maru*?

Summary

The study of group behavior has become one of the most important areas in the study of organizational behavior during the past fifty years. Leaders in all types of organizations should be interested in group behavior, principally because much of an organization's activity and decision making is conducted within groups. "The determination as to whether a decision is good or bad will be made [by society] based on the eventual outcomes of that decision" (Gaskins 1988, 43). One method of doing this is judging decision quality by examining the decision-making procedures utilized when the decision was actually made.

In researching this subject it is intended not only to ascertain the presence or nonpresence of groupthink on board the USS *Greeneville* when she collided with the *Ehime Maru*, but also to give valuable firsthand Navy examples of groupthink possibly being exhibited. By providing these examples, it is hoped that this thesis provides leaders with the ability to recognize, neutralize, and guard against groupthink. A natural fallout of this research will be the identification of warning signs of the presence of groupthink and methods leaders can utilize to neutralize the potentially damaging effects of the phenomenon.

The weight of collected, analyzed, and assimilated information within the defined criteria will either substantiate or refute the idea that groupthink was present and potentially a contributing factor of the USS *Greeneville's* accident with the *Ehime Maru*

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on 9 February 2001. This critical analysis will apply the theoretical truths of Janis to the

actual events that occurred on 9 February 2001.

Table 1. Groupthink Research Question Matrix	
Key Question	Yes/No
Was the crew on the *Greeneville* cohesive? • Did crew have a high degree of esprit de corps? • Did crew value their affiliation with the ship? • Had the crew reached the performing stage of group development?	
Groupthink Conditions Present	
Was the crew an insulated group? • Were crewmembers allowed to seek expert information from others within the crew?	
Did the commanding officer practice impartial leadership? • Did the CO push for his own preferences? • Did the CO encourage open and unbiased inquiries into his preferences? • During this evolution was the CO manipulative in ensuring his preference was followed?	
Was there a lack of norms for methodical procedures**?** • Did the submarine have written standard operating procedures (SOPs) for the evolution? • Did the CO's orders follow or not follow those SOPs? • If the CO did not follow established SOPs did this fact allow the crew to feel that a new group norm was emerging in favor of a particular procedure?	
What was the homogeneity of the crew and what if any effect did it have on the decisions? • Was there a lack of disparity in social background of the crew? • Was there a lack of disparity in ideology of the crew? • If yes to the two above questions did that cause the crew to just focus on one course of action?	
Was the crew or CO experiencing high stress from external threats? • Was there any pressure resulting from time constraints? • Was the maneuver inherently dangerous or stressful? • Did the submarine have enough crewmembers to man all watch stations?	
Did the crew suffer from low self-esteem? • Did the CO's action result in any potential lowering of an individual's self-esteem? • Was there any behavioral evidence suggesting low self-esteem?	

Table 1--Continued	
Groupthink Consequences Present	Yes/No
<u>Was there an illusion of invulnerability on board the USS *Greeneville*?</u> • Was there some degree of reassurance about obvious dangers? • Were they overoptimistic and willing to take risks? • Did the crew respond to clear warnings of danger?	
<u>Was there a belief in an inherent morality?</u> • Did the crew ignore the ethical consequences of their actions? • Did the crew share a belief that we are a good and wise group and that since our groups objectives are good the result will therefore be good?	
<u>Were there efforts at collective rationalization?</u> • Did the crew construct rationalizations in order to discount warnings? • If so, did this potentially lead to defective decision making and possibly groupthink? • Did the crew discount negative information concerning the assumptions upon which they based their decisions?	
<u>Was there stereotyping of out-groups?</u> • Did the crew hold stereotyped views of the outgroups or nonconformers?	
<u>Did the crew self-censor themselves?</u> • Did the crew avoid deviating from what appeared to be group consensus? • Did the crew keep silent about their misgivings and even minimize to themselves the importance of their doubts?	
<u>Was there an illusion of unanimity?</u> • Did the crew share the belief that all were in agreement with the decision? • Did the crew believe that the silence on the part of crewmembers indicated that they were in agreement with what was being expressed?	
<u>Was there direct pressure on dissenters?</u> • Was direct pressure applied to any members who expressed doubts or who questions the validity of decisions?	
<u>Were there self-appointed mindguards?</u> • Did crewmembers appoint themselves as mindguards to protect the leader from adverse information?	

Questions were formulated from the following sources: Janis, 1982, pp. 256-259; D. H. Johnson, and F. P. Johnson, 1982, pp. 415-417; G. Moorhead, R. Ference, and C. P. Neck, 1991, pp. 542-545.

CHAPTER 4

CRITICAL ANALYSIS

Conflict is the gadfly of thought. It stirs us to observation and
memory. It instigates invention. It shocks us out of sheeplike
passivity, and it sets us at noting and contriving. . . .Conflict is the
sina qua non of reflection. (Brainyquote n.d., 1).

John Dewey

Background and Introduction

On 9 February 2001, the USS *Greeneville* (SSN-772) got underway for routine

training and to show sixteen civilian visitors the capabilities of a United States Navy

nuclear submarine. Less than one hour from her scheduled return to Naval Base Pearl

Harbor, the USS *Greeneville* conducted an emergency blow maneuver, whereby the

submarine emitted high pressure air into her ballast tanks creating buoyancy, sending the

submarine rocketing towards the surface. This maneuver is a maintenance evolution that

is practiced periodically to ensure a submarine is capable of executing the maneuver in

case of an emergency. Once this maneuver is started it is extremely difficult if not

impossible, to stop depending on the depth of the submarine. Upon surfacing the USS

Greeneville collided with the Japanese fishing training vessel *Ehime Maru*. Within ten

minutes the *Ehime Maru* sank along with nine of her complement, including four

Japanese high school students.

This chapter critically analyzes the events of 9 February 2001 on board the USS

Greeneville. Specifically, this researcher critically analyzed the small group dynamics on

board the USS *Greeneville* prior to her accident, as well as leader subordinate interaction

during the actual emergency blow maneuver, and how they relate to the phenomenon

known as groupthink. It is apparent that a defective decision-making process was in place during the emergency blow maneuver, since the Navy has established guidelines and procedures to ensure the evolution is done safely. The analysis attempts to ascertain the presence, or lack thereof, of cohesiveness that, according to Janis' theory (1982), is a required antecedent for groupthink to be present. Next, the analysis attempted to determine whether groupthink conditions and consequences were present on board the USS *Greeneville*. Figure 5 provides a graphical representation of the Janis theory as it relates to defective decision making.

To establish the presence or nonpresence of groupthink on board the USS *Greeneville,* many tertiary questions needed to be answered. These questions evolve from Janis' theory of groupthink, which states, "Groupthink is a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members striving for unanimity override their motivation to realistically appraise alternative courses of action" (Janis 1972, 8). The questions revolve around the established antecedents, conditions and consequences of Janis' theory and are included in Table 1.

The data and information which were utilized for this critical analysis came from the preliminary inquiry and the Navy Court of Inquiry (NCOI) investigations of the USS *Greeneville* accident. Included in these inquiries are interviews, sworn testimony, personal notes, and observations. Additionally, newspaper and periodical articles are used when necessary to add clarification.

<center>Critical Analysis</center>

<center>Cohesion</center>

Cohesion refers to the attraction groups of people have to relate, maintain group membership, and be identified as a group. It is desirable for teams to build rapid cohesion because it tends to unify and align efforts, enable group pressure for sanctioning deviance and increase team esprit de corps. Teams that have high cohesion tend to develop strong culture and norms, have high morale and satisfaction, are loyal and committed, and are productive. According to Janis (1982), cohesion is the one antecedent that must be present for groupthink to be present. It would be unlikely that groupthink would be present if the members of the group disliked each other and did not value their membership in the group. Other antecedents and conditions will be present, but without cohesion Janis' theory is not supported.

Was the crew on the USS *Greeneville* cohesive?

To answer this main question, which is absolutely essential to the thesis, three tertiary questions were drafted, researched, and analyzed. The data and analysis of these questions follow.

Did the crew of the USS *Greeneville* have a high degree of esprit de corps?

The *American Heritage Dictionary* defines esprit de corps as: "A common spirit of comradeship, enthusiasm, and devotion to a cause among the members of a group" (2002). The military organization embodies this definition. The men and women of the armed forces are trained to abide by the common spirit of comradeship, enthusiasm, and devotion to a cause. *The Armed Forces Officer* says, "The interesting and important

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thing that happens when people enter the military service is that the moment they take the

oath, loyalty to the nation becomes the first priority. . . .[T]hey must persevere in ways

that are most useful to the nation, the service, the unit, and themselves" (Armed Forces

Information Service 1988, 59). "A submarine is really different," Vice Admiral Bernard

M. Kauderer, a retired commander of the Atlantic submarine fleet, said in an interview,

"In a submarine--and it's very difficult to describe--there is a sense and a need for

teamwork. There is a bond between the captain and his officers, between the captain and

his petty officers and between the officers and the crew" (Myers 2001, 1). The

approximately 150 men who live and operate on a naval submarine and interact with the

same men twenty-four hours a day have a strong sense of esprit de corps, so it is

reasonable to assume that this was the case on the *Greeneville*.

Did the crew value their affiliation with their ship?

Valuing an affiliation with a group is similar to esprit de corps in that a

comradeship develops within the crew. Sailors join the Navy to serve their country,

whereas valuing their affiliation with their ship places their feelings and actions in the

realm of pride. Are the crewmembers proud of their ship, their shipmates, and their

captain? Do they think they are the best?

The NCOI's findings include the following: "The crew of GREENEVILLE

respected CDR Waddle's technical proficiency, admired him as a CO, and had grown

accustomed to receiving praise under his leadership" (NCOI 2001, 11). The inquiry

continued,

> Experienced and inexperienced crewmembers alike were positive about serving
> on board GREENEVILLE. The crew believed their command to be among the
> Navy's elite fast attack submarines. . . . These beliefs were positively reinforced

by the chain of command. GREENEVILLE consistently received above average, or higher, marks in Submarine Squadron ONE and SUBPAC evaluations of performance. The ship . . . was a strong contender for Squadron One's Battle Efficiency ["E"] Award despite the fact she had not deployed [a rare occurrence] (NCOI 2001, 11-12).

It is readily apparent from the supporting evidence that the crew valued their affiliation with the *Greeneville*. The CO and COMSUBPAC both helped promote this feeling through awards, special assignments and recognition.

Had the crew reached the performing stage of group development?

The performing stage of group development is characterized as when "team members become comfortable with each other, and better understand the project and what is expected of them, they become a more effective unit with everyone working together" (Scholtes 1988, 6-7). When a group is operating at the performing stage the members have insights into group processes and of the team's strengths and weaknesses, are satisfied with the group's progress, are able to work through group problems, and feel a close attachment to the team (Scholtes 1988, 6-7).

In a 23 April 2001 article in *Time*, Terry McCarthy and Jeannie McCabe wrote,

Waddle earned the absolute trust of his crew, and had the highest re-enlistment rate--65%--of any attack sub in the Pacific Fleet. And the skipper [CDR Waddle] proudly allowed re-enlisters to commemorate their return in almost any fashion they wanted. Be it parachuting out of an airplane or floating in full dive gear in the ocean, Waddle would be along for the rite of passage (33).

There is no doubt that the *Greeneville* and her crew believed and exhibited traits that they were operating at the performing stage of group development, which includes being comfortable with each other, understanding their individual roles and how those roles relate to the ultimate goal, and knowing what is expected of them (Scholtes 1988, 6-7). However, as the analysis continued, indicators to the contrary were evident.

Based on the analysis, it is readily apparent that the crew of the *Greeneville* had high levels of esprit de corps, affiliation, believed they had reached the performing stage of group development, and thus was a very cohesive group.

Groupthink Conditions

Conditions that produce, elicit, or facilitate the occurrence of groupthink and their presence or nonpresence will be analyzed in this section. As mentioned previously, cohesion is not enough by itself for groupthink to occur. Certain additional antecedent conditions must be present to foster a defective decision-making process. The groupthink phenomenon can emerge whenever certain conditions that are conducive to it are present.

<u>Was the crew an insulated group?</u>

Insulation of the group refers to an environment that has been established which provides no opportunity for the members of the group to obtain expert information and critical evaluation from others within the organization (Janis 1982, 176).

Were crewmembers allowed to seek expert information from others within the crew?

It appears from all accounts that the crew of the USS *Greeneville* believed in themselves and had a very good and dynamic command climate which allowed for interactions, study, and training with one another. This question on the surface seems easily answered, yet the insulation of a submarine crew, in that they spend months at a time underway beneath the surface of the ocean with no outside contact, could tend to reduce objectivity. If this objectivity was reduced drastically it could contribute to a lack of awareness and a poor survey of alternatives when facing a crises. An additional interesting fact is that Commander Waddle was indeed insulated from his crew during the

moments prior to surfacing. His crew had all necessary information, but they did not

share this information due to his manner and belief in his technical skills. Specifically,

"the CO did not ask for the Officer of the Deck's (OOD)[1] understanding of the surface

contact picture, either to help develop his own situational awareness or to critically assess

the situational awareness of his OOD and/or watchteam. . . . His only concern at that

point was to acquire his own understanding of the surface contact picture" (NCOI 2001,

30). Later, when the submarine was approximately five to ten minutes away from the

collision, the fire control technician of the watch (FTOW)[2], whose job is to keep a

graphical representation of contacts, bearing, and bearing rates heard the CO say, "I have

a good feel for the contact picture" (NCOI 2001, 45).

Although crewmembers were able to seek expert information from others in the

crew, it appears that the CO set himself up for failure in that expert information was

being withheld from him unknowingly, and from other members of the crew.

Did the commanding officer practice impartial leadership?

Janis (1982) describes impartial leadership as: in the absence of appropriate

leadership traditions, the leader finds it all too easy to use his power and prestige to

influence members of the group to acquiesce to his preferred actions instead of allowing

active engagement of open inquiry and critical evaluation (176).

Did the CO push for his own preferences?

No doubt the CO of a navy submarine in preparing for a maneuver, such as an

emergency blow, will have his preferred methods and procedures. Additionally, the

officers and men are well aware of established Navy guidelines, procedures and

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instructions. However, at times such as this the CO takes it upon himself to train his

crew, as one of his main responsibilities is to train his replacements--the future leaders of

the Navy.

The NCOI states, "Testimony described CDR Waddle as a gregarious,

charismatic, professional naval officer, one self-confident in his own abilities and quick

to take advantage of opportunities to make his command, the Navy, and himself look

good" (2001, 10). Another note in the NCOI goes on to say,

> He [the CO] assumed a "hands on" management style, particularly during
> operational evolutions requiring precision and attention to detail. This tendency
> was noted by the admiral of Commander, Submarine Force, U. S. Pacific Fleet
> COMSUBPAC), who specifically saw fit to mention this trait to CDR Waddle
> during an embark on board GREENEVILLE in March 2000. At that time,
> COMSUBPAC told CDR Waddle to "not run too fast," and to give his crew the
> opportunity to grow (NCOI 2001, 10).

Lieutenant Sloan, navigator on the USS *Greeneville*, stated in the preliminary

investigating officers report,

> [I] had a feeling the CO was becoming too directive. Very hands on . . . During
> recent exercise . . . CO had been extremely directive. OOD's were simply
> parrots. . . . CO would go back to his stateroom but continue to drive the boat off
> video displays in his stateroom, course changes, rudder to use, etc. . . . Navigator
> discussed with CO. Response was that OOD's would learn from the way he was
> doing it (NCOI 2001, Exhibit 50, 3).

The NCOI summed it up best,

> When the CO directed the OOD to be at periscope depth in five minutes,
> no one thought to question whether he had given the OOD an impossible task.
> When the CO stated, "I have a good feel for the contact picture" before ordering
> the ship to periscope depth, no one questioned his situational awareness of the
> new contact. When the CO declared, "I hold no visual contacts" after completing
> his periscope search, the FTOW simply out-spotted his 4,000 yard range solution
> on contact S-13,[3] believing the system solution was wrong because CDR Waddle
> hadn't seen any surface contacts through the periscope. The SUBPAC Chief of
> Staff and XO harbored concerns that the CO was moving quickly, but never
> questioned him about it, believing CDR Waddle to be in control of events. On 9

February, no one thought to critically question the CO's judgment. CDR Waddle was driving the ship and didn't need their help. The CO's self-assured statements and the team's confidence in his abilities negated their watchfulness and denied the CO critically important backup (NCOI 2001, Summary, 7)

Commander Waddle added,

…[I] may have been regarded too highly by my men. I so truly believed in my professional ability, and I believed in my men so much, and they also believed in me. It was that relationship that led to my demise. Because when I said I didn't see anything [during the periscope search…], there was nothing there--that was the truth for them (McCarthy and McCabe 2001).

On 9 February Commander Waddle took it upon himself to ignore most of the policies and procedures and utilized his power and prestige to ensure his preferred actions were followed. Essentially, he did not practice impartial leadership.

Did the CO encourage open and unbiased inquiries into his preferences?

Although the command climate appeared to be such that the crew could question and discuss decisions, it seems that, in actuality, the gregarious and charismatic leadership of Commander Waddle did not encourage the open kind of communication that is required when operating a vessel like a nuclear submarine. The NCOI implies that Commander Waddle's manner and leadership style led the crew to "a false sense of security and confidence in their own professional skills. They believed they were better than they really were, and lost their ability to critically assess themselves" (NCOI 2001, 106).

Commander Waddle's gregarious and charismatic leadership style served him well in the past and he believed he was open to his crew. It appears that Commander Waddle's leadership style got the better of him on 9 February and crewmembers did not feel they could question the way he was running the maneuver.

During the emergency blow evolution was the CO manipulative in ensuring his preference was followed?

Evidence does not show any blatant intentional manipulation on the part of the

CO. However, his actions show that in essence this is exactly what he did by

> creating an artificial sense of urgency that contributed to the collision with EHIME MARU. Behind schedule, he convinced himself that, by personally conducting ship maneuvers, he could rapidly complete all events and minimize a late return to Pearl Harbor. He injected himself into virtually every action-- effectively assuming the Deck and Conn, cutting Time Motion Analysis (TMA)[4] legs short and conducting a non-standard, abbreviated periscope search--to save time. In doing so, he marginalized key contact management personnel and cut corners on prescribed operational and safety procedures. Speeding up ship maneuvers requires more, not less, backup from the crew to conduct those evolutions safely and efficiently. (NCOI 2001, Summary 5)

Additionally, the NCOI states,

> The CO effectively assumed the Deck and the Conn from the OOD at the start of angles until the collision occurred. Recognizing that he had one of his most methodical and deliberate OOD's on watch, CDR Waddle took control and directed the maneuvering of the ship in an effort to speed things up. The OOD became a relay for the CO to pass maneuvering orders to the Ship Control Party. (NCOI 2001, Summary 3)

In summary, the CO routinely inserted himself into every evolution of the

maneuver, thereby ensuring his preferences and plans were followed and limiting the

impartiality of the crew.

Was there a lack of norms for methodical procedures?

If the performance of the crew of the *Greeneville* prior to 9 February 2001 was

examined, the examination would show a crew and a CO who the Navy said routinely

followed the norms of Navy regulations and SOPs. The CO and crew routinely abided by

a strict adherence to the methodical procedures required for submarine operations.

Commander Waddle's mantra for the *Greeneville* was "Safety, Efficiency, Backup," (Sanchez 2001, 8) but it would not hold true on this day.

Did the submarine have written SOPs for the evolution?

Yes, not only did the *Greeneville* have individual and tailored SOPs there are SOPs covering the entire submarine fleet for all evolutions.

Did the CO's orders follow or not follow the SOPs for operations?

The entire NCOI is filled with examples of where the SOPs were not followed during the entire underway period on 9 February 2001. The NCOI final opinion states, "A principal cause of the collision was the CO's disregard of standard submarine operating procedures and his own standing orders" (NCOI 2001, 103). The NCOI continues, "The artificial urgency created by the CO caused him to deviate from NWP [Naval Warfare Publication][5] guidance and his own Standing Orders when performing TMA, the ascent to periscope depth, and his visual search at periscope depth." The NCOI continues, "The CO's order to the OOD that 'I want you to prepare for and be at periscope depth in five minutes' was unreasonable and indicated that time was a significant factor as GREENEVILLE continued through afternoon ship maneuvers" (NCOI 2001, 103-104).

Continuing, the NCOI states,

Had the CO conducted a proper search in accordance with NWP 3-13.10 guidance and his own Standing Order 6, he would have detected EHIME MARU" (2001, 105).

Finally, the report states,

The CO was inappropriately disposed to entertain his civilian guests rather than safely demonstrate GREENEVILLE's operational capabilities. For example:

a. His unauthorized excursion to test depth to obtain deep seawater samples as mementos and driving the ship at flank speed needlessly exposed civilians to classified information.

b. Breaking "rig for dive" to obtain mementos inappropriately placed entertainment before safety of own ship.

c. Permitting the use of the Sonar Working Tape Recorder to play whale sounds for civilians took an important piece of equipment off-line.

All these actions denote an inappropriate informality regarding shipboard operations on 9 February. (NCOI 2001, 107)

If the CO did not follow established SOPs, did this fact allow the crew to feel a new group norm was emerging in favor of a particular procedure?

The fact that the crewmembers idolized their CO and trusted him explicitly had a definite impact on how the crew reacted to what is going on around them. If they saw the CO cutting corners, they themselves would be more likely to do the same. The NCOI stated, "The crew of GREENEVILLE respected CDR Waddle's technical proficiency, admired him as a CO, and had grown accustomed to receiving praise under his leadership. Having CDR Waddle in the Control Room during events added a sense of security to watchstanders" (NCOI 2001, 11). The report goes on to say, "They [the crew] trusted his judgment as it had brought them success. This was a factor in the crew not providing the degree of forceful backup that was required on 9 February" (NCOI 2001, 106).

The SOPs and regulations were not routinely followed during this evolution. The Navy implements SOPs and regulations to ensure accidents like the one between the *Greeneville* and the *Ehime Maru* do not occur. The fact that the CO ignored the rules and regulations led to a laissez-faire attitude on the submarine.

<u>What was the homogeneity of the crew and what, if any, effect did it have on the decisions?</u>

The *American Heritage Dictionary* defines homogenous as "Of the same or similar nature or kind: *"a tight-knit, homogeneous society"* (James Fallows)" (2002). In the groupthink model Janis (1982) was concerned with the lack of homogeneity and that a lack of disparity in social background and ideology among members of a cohesive group would make it easier for them to concur with whatever decision was facing them (1982, 250). The crew of the *Greeneville* no doubt came from vastly different social and economic backgrounds. Although they were now United States Navy Sailors and were in essence a tight-knit, homogeneous society, it is unlikely that homogeneity had any negative effect with regards to this incident. The author was unable to find anything that supported or refuted even a remote concern for homogeneity.

<u>Was the crew or CO experiencing high stress from external conflicts?</u>

Janis (1982) writes that, "circumstances of high stress from external threats . . . will result in an increase in concurrence-seeking" (1982, 254). "Under conditions of high external stress, the main incentive for the members [of the group] is to rely on the leader's wisdom and try to maintain group harmony" (Janis 1982, 255). There were definitive indicators that stress did exist on the *Greeneville,* as well as possibly an attempt by the crew to rely on the CO to eliminate the stress. Specifics with regards to stress and its causal factors are included in the following results.

Was there any pressure resulting from time constraints?

Pressure resulting from time constraints can and often does affect the mental efficiency of a person, either acting alone or as part of a group. Time pressures are also a causal factor of stress (Janis 1982, 109).

The stressor in question was the need to get back to Naval Station Pearl Harbor on time. The CO had been taking his time in showing off "his boat" to the visitors and was now going to be late if things were not accelerated. The NCOI details these events as follows,

> At about 1306 on 9 February, the XO [Executive Officer] informed the CO that the ship needed to start afternoon ship demonstrations for embarked civilian guests. GREENEVILLE was approximately 12-13 miles from "Papa Hotel," a point in the ocean at the entrance to Pearl Harbor where GREENEVILLE was scheduled to be at 1400. Already over 30 minutes behind the schedule posted in the Plan of the Day (POD), the ship had less than an hour to get to "Papa Hotel." In response, the CO took several actions that created an artificial urgency in the Control Room that directly contributed to the collision.
> First, he ordered a chemistry sample secured before analysis was complete. With the ship behind schedule, the CO ordered the OOD to secure the sample in order to ready GREENEVILLE for "angles" (i.e., up-and-down movement in the water column to demonstrate the submarine's ability to rapidly change depth) and high-speed maneuvers.
> . . . as the ship neared completion of the angles demonstration, the XO again reminded the CO of the time and distance to "Papa Hotel." "I know what I'm doing," the CO replied. Shortly after high-speed maneuvers, the CO told the OOD, "I want you to prepare for and be at periscope depth in five minutes." The CO testified that he gave the order as a training goal to a methodical and inexperienced OOD. He admitted, however, that this was an impossible task, even for an experienced OOD. By CO GREENEVILLE Standing Order 6, it would take at least eight minutes for the OOD to prepare for and get to periscope depth. That Standing Order required OOD's to hold a periscope brief with watchstanders, conduct two good target motion analysis (TMA) legs of about three minutes each on each surface contact, provide the necessary report and obtain the CO's permission to proceed to periscope depth, and make the ascent. (NCOI 2001, Summary 3)

The NCOI continues,

LTJG Coen (OOD), normally a methodical and deliberate watchstander, was not given time to develop an accurate picture of the surface contact situation. In the rush to come to periscope depth, he did not conduct the normally required periscope brief with watchstanders. By not conducting the brief, he missed a valuable opportunity to receive and critically assess important contact and sea state information normally provided by Sonar. (NCOI 2001, Summary 3)

The report continues,

In the rush to come to periscope depth, other personnel in the Control Room were not given time to perform their jobs properly. The Diving Officer of the Watch (DOOW) did not have time to trim the ship properly at 150 feet to support achieving the desired up angle at periscope depth. Upon hearing Sonar's report for new contact S-14, the FTOW hurried to complete his analysis of all three surface contacts prior to coming to periscope depth, thereby overlooking an updated 4,000 yard closing solution on contact S-13 (EHIME MARU). In the critical minutes before proceeding to periscope depth, he focused entirely on new contact S-14, which he considered to be the primary contact of interest because of the single leg TMA solution. Focused on S-14, he tragically ignored the true contact of significance, S-13. (NCOI 2001, Summary 3)

Continuing, the NCOI stated,

The CO effectively assumed the Deck and the Conn from the OOD at the start of angles until the collision occurred. Recognizing that he had one of his most methodical and deliberate OOD's on watch, CDR Waddle took control and directed the maneuvering of the ship in an effort to speed things up. The OOD became a relay for the CO to pass maneuvering orders to the Ship Control Party. (2001, Summary 3)

Confident he knew the contacts, and pressed for time, he failed to use the team to build his understanding of the surface picture. He effectively denied himself essential backup from watchstanders who had critically important contact information to provide. Further, he denied himself the opportunity to assess the situational awareness of the team, which could have revealed confusion and lack of reliable contact solutions. (NCOI 2001, Summary 4)

[Finally], while at periscope depth, the CO interrupted the OOD's periscope search and performed his own visual search. Behind schedule and confident all contacts were distant, CDR Waddle took the periscope and conducted a non-standard, abbreviated search that failed to account for safety of own ship and surface vessels. (NCOI 2001, Summary 4)

The NCOI sums it up by writing,

CDR Waddle created an artificial sense of urgency that contributed to the collision with EHIME MARU. Behind schedule, he convinced himself that, by personally conducting ship maneuvers, he could rapidly complete all events and minimize a late return to Pearl Harbor. He injected himself into virtually every action--effectively assuming the Deck and Conn, cutting TMA legs short and conducting a non-standard, abbreviated periscope search--to save time. In doing so, he marginalized key contact management personnel and cut corners on prescribed operational and safety procedures. Speeding up ship maneuvers requires more, not less, backup from the crew to conduct those evolutions safely and efficiently. (NCOI 2001, Summary 5)

Time pressures resulting from a potential late arrival at the rendezvous point and thus, a late arrival at Pearl Harbor were present and had a definite impact on the CO's actions and his interaction with his crew.

Was the maneuver inherently dangerous or stressful?

No doubt the maneuver is dangerous in that once the evolution is started it is extremely difficult to stop. Sending 7,000 tons of steel to the surface is no picnic in the park, but procedures and regulations are designed to take most of the stress out of the evolution. There was no evidence in the NCOI which led the author to the belief that any crewmember, including the CO and OOD, was stressed out about the maneuver.

Did the submarine have enough crewmembers to man all watch stations?

The *Greeneville* embarked with 11 of 17 officers and 95 of approximately 125 enlisted men (NCOI 2001, 15). According to LCDR Pfeifer, executive officer of the *Greeneville,* he felt comfortable and still feels comfortable with the level of manning for a short seven hour underway (NCOI 2001, Exhibit 75, 1 of 8). While there is nothing mentioned in the NCOI with regard to the impact of not having a full complement on board, the author's opinion is that the six sonar operators (NCOI 2001, 15), including the leading chief petty officer (LCPO), who were ashore conducting training, could have

made the deciding difference with regard to this tragedy. It is the author's belief that if the LCPO of the sonar shop had been on board he would have been intimately involved in this evolution, as he was the most knowledgeable and experienced sonar operator on board. Additionally, the presence of the additional six sonar operators would have ensured that the watch stations would have been manned as coordinated with the watch officer and as listed on the submarine's watch bill. Last, but certainly not least, a chief petty officer has a unique relationship with the officers he serves. He is the technical expert who has earned enough respect to question the officer's actions if he sees something wrong. There was no chief petty officer involved in the watch team that day and the presence of one should have made the difference.

Did the crew suffer from low self-esteem?

The crew admired and respected its CO. In Commander Waddle's Prospective Commanding Officer (PCO) Evaluation, the evaluators wrote, "May kill his crew with kindness. To a fault became overly concerned with those receiving constructive criticism. Overall will take care of his crew" (NCOI 2001, Exhibit 49, 1 of 1). Admiral Griffiths, the Navy's preliminary investigating officer, suggested that the fire-control technician, an experienced petty officer, did not report the nearby sonar contact because he had seen Commander Waddle talking directly with the sonar operators and may have felt that the commander knew better what their readings showed. The petty officer "felt physically benched" (Myers 2001, 1).

Did the petty officer feel this way? Did the OOD, Lieutenant Junior Grade Coen, feel similar? How many others on board might have felt "physically benched" due to the CO's mannerisms and take-charge attitude that day? The author finds no evidence of low

self esteem on a crew or individual level on a long term basis. However, the author

believes that on 9 February the CO's actions essentially caused a time period of low self-

esteem when he physically benched not only the FTOW but the OOD as well.

Groupthink Consequences

<u>Was there an illusion of invulnerability on board the USS *Greeneville?*</u>

This symptom is defined as excessive optimism that encourages taking extreme

risks with little consideration of what would happen if the worst outcome should occur or

the consequences of the solution proposed by the group. Invulnerability always includes

the overestimation of the potential success of the solution or the abilities of the group

(Janis 1982, 174-175).

Was there some degree of reassurance about obvious dangers?

Although an emergency blow evolution would be dangerous for an inexperienced

crew, to a seasoned, well-trained, battle-ready, and soon-to-be-deployed unit the

evolution should have been a standard event. Inherently dangerous, yet risk averse due to

excessive predeployment training, exercises, and SOPs, the maneuver should have been a

routine evolution. As mentioned in the previous section the crewmembers believed they

were good and that their CO was better and would keep them out of harms way.

Was the crew overoptimistic and willing to take risks?

It has been established that the crew was probably overoptimistic but there is no

supporting evidence that indicates the crew knowingly took risks. The command climate

on board the submarine was one of high confidence in the CO and themselves. No doubt

the crew's attitude toward their CO's abilities and the favor they felt they had gained

from COMSUBPAC was a key component toward their overall high opinion of their submarine and their abilities.

Did the crew respond to clear warnings of danger?

The NCOI gives numerous examples of the crew not responding to key warnings of danger. On 9 February 2001 the submarines Analog-Visual Signal Display Unit (AVSDU)[6] was discovered to be not working prior to getting underway. The NCOI states, "The CO never took affirmative action to address with the XO, navigator (NAV), or the OOD's what AVSDU compensation would be put into effect for this underway period" (NCOI 2001, 17). Basically, the CO expected his officers to know what to do and did not question them. No one on the *Greeneville* took any action to institute some type of formal procedure to put in place some form of backup to ensure situational awareness (NCOI 2001, 17). The NCOI says,

> Commencing at approximately 1300, the Contact Evaluation Plot (CEP)[7] was not used to track and display surface contact information. The CEP is a paper display maintained in the Control Room, on which own ship's data (e.g., course, depth, speed), as well as contact bearings and classification, are plotted. By CO GREENEVILLE Standing Order 0230 and 0630, the CEP is to be maintained at all times.
> The FTOW made an affirmative decision not to update contact information on the CEP after 1300 on 9 February. His stated rationale was that the general contact situation was not of significant density and that it would have been difficult to keep the CEP updated during angles and high-speed maneuvers, and that civilian guests were standing between his watchstation and the CEP. The FTOW never informed anyone of his decision, nor did he ask for assistance despite the presence of FT3 Brown, who had remained in the Control Room and was available to work the CEP. The CO, XO, and OOD failed to notice that the CEP had not been updated. (NCOI 2001, 26)

When departing Pearl Harbor in the morning, the navigator noticed that the haze was the worst he had ever seen and said to investigators, "Probably the worst I've ever seen, where you could actually see a long, long distance, but not see clearly very far at

all" (NCOI 2001, 18). He goes on to tell that he had no trouble acquiring a dark hulled freighter in the periscope but had extreme difficulty in acquiring the white-hulled vessel. This information was not passed to the OOD or CO (NCOI 2001, 18). (*Ehime Maru* was a white-hulled vessel.)

Most notable though are the actions of the FTOW when he heard the CO say two things, which led him to not recognize potential dangers. First, when he heard the CO say "I have a good feel for the contact picture" (NCOI 2001, 45), the FTOW wrongly assumed that indeed the CO did and did not offer up any clarifying information. Secondly, when the CO was looking through the periscope and stated, "I hold no visual contacts at high power" (NCOI 2001, 53) he assumed he was wrong in his calculations and changed his calculations. Indeed the FTOW's original track was correct.

Although none of these actions by themselves is enough to cause a disaster, when factored together they set conditions for a catastrophe. The warning signs were present, yet ignored by the CO on down through the watch team. Essentially, members of the watch team did not react to clear warnings of danger and believed they were invulnerable to mistakes, since their CO and they themselves were so good.

Was there a belief in an inherent morality?

This symptom implies that the group ignores the ethical or moral consequences of their decisions (Janis 1982, 174-175).

Did the crew ignore the ethical consequences of their actions?

There is no evidence or indication that the crew ignored any ethical consequences of their actions. It is the author's belief, based on the facts, that if anyone of these

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professional submariners was aware of anything wrong going on he would have informed

someone and been listened to.

Did the crew share a belief that they were a good and wise group and that since the groups' objectives were good the result would therefore be good?

The crewmembers believed in themselves and believed they were the best fast-

attack submarine in the Pacific Fleet. Commander Waddle, as well as COMSUBPAC,

had helped breed that feeling through awards, accolades, special missions, and potentially

the Battle Efficiency "E" award. The crewmembers thought they could do no wrong and,

in the author's opinion, based on the evidence, never even thought that they could do

something as catastrophic as what occurred. In essence the crew told themselves, "Those

kinds of bad things happen to the other guys, not the *Greeneville*."

Were there efforts at collective rationalization?

Collective rationalization is an effort by members of the group to discount,

withhold, or distort warnings and other information that could threaten the group's belief

by convincing themselves as to the validity of the group's position. The group does not

realistically or seriously consider outside information or other potential decision

alternatives (Janis 1982, 174-175).

Did the crew construct rationalizations in order to discount warnings?

There were two incidents which fall into this line of thinking. The first, is when

the FTOW heard the CO say, "I have a good feel for the contact picture" and the next is

when he heard the CO say, "I hold no visual contacts at high power." Although the

FTOW had plotted the correct track, his confidence in the CO and obvious lack of

confidence in himself caused him to not speak up and to change the official track of the surface contacts.

Secondly, the NCOI states, "The XO failed to discuss his concerns with the CO over the compressed time period imposed upon the OOD to make periscope depth in five minutes. The XO also failed to recommend an additional TMA leg for the purpose of analyzing a new contact" (2001, 109).

In a *Philadelphia Inquirer* article published 19 March 2001, Joan Conrow writes, "Other officers have testified that Waddle tended to be very directive of his junior officers, and that crew members may have trusted Waddle's instincts so thoroughly that they were hesitant to speak up about their own concerns"(1). This statement has been backed up in previous evidence presented, as well as these comments by the navigator on board the *Greeneville*,

> [I] had a growing feeling that the CO was becoming too directive. Very hands on. … OOD's were simply parrots. CO drove the ship from his stateroom. Navigator was frustrated and discussed with CO. Response [from the CO] was that the OOD's would learn from the way he was doing it (NCOI 2001, Exhibit 50).

Taken individually these issues are not extremely significant; however, when combined with crew cohesion and belief in the CO to the point of feeling he could do no wrong, the combination of these factors resulted in a rationalization which caused the crew to discount warnings.

Did the crew discount negative information concerning the assumptions upon which they based their decisions?

In a manner of speaking, this is exactly what happened with the XO, OOD, and FTOW, based on evidence in the preceding paragraphs. Specifics about the XO and FTOW have already been stated; however, the OOD was the person responsible for the

deck and the conn. When the CO became actively engaged in almost every aspect of the watch operations, the OOD did not relinquish the deck or conn officially. As the OOD, he had the power, ability, and indeed the responsibility to pass the word, "The CO has the deck and conn" or to notify the CO as to his belief that the actions being taken were inappropriate.

Although not inappropriate, it would be unreasonable to expect this kind of bold interaction between a junior officer and his CO. The NCOI noted that the OOD had little underway experience and that he was slow and methodical (2001, 110). Consequently, this was not a good combination of events when the CO began rushing the crew to periscope depth.

The FTOW especially and, to a lesser extent, the OOD both discounted negative feelings about what was going on around them, as in the FTOW out spotting the contact (which turned out to be the *Ehime Maru*) and the OOD not conducting standard briefs and evolutions in his attempt to be at periscope depth in the time set by the CO (NCOI 2001, 110).

Was there stereotyping of outgroups?

"Just as the groups are overconfident in their own powers and morality, they tend to believe their opponents are weak or foolish" (Baron 1998, 282). This results in an underestimation of their opponent's ability to counter or interfere with the group's plan (Janis 1982, 174-175).

Did the crew hold stereotyped views of the outgroups or nonconformers?

There was no indication of stereotyped views or any indication that any crewmember felt like he was a member of an outgroup.

Did the crew self-sensor themselves?

This occurs when members hold back expressing their doubts or deviations from the apparent group consensus. This may reflect each member's inclination to minimize to himself the importance of his doubts, uncertainties, and counterarguments (Janis 1982, 175).

Did the crew avoid deviating from what appeared to be group consensus?

It is evidently clear that this was happening to a large extent. The XO, navigator, OOD, and FTOW all had indications that things were being done incorrectly. They all heard the CO demand to be at periscope depth in five minutes, even though everyone, including the CO, said that his orders were impossible to accomplish. According to CO *Greeneville* Standing Order Six, it would take a minimum of eight minutes to properly conduct all aspects of this maneuver. The NCOI states, "The artificial urgency created by the CO caused him to deviate [from established procedures] to ascend to periscope depth" (2001, 103). Based on the crew's feelings with reference to their CO and his gregarious and charismatic leadership style, Commander Waddle unknowingly established what the group consensus would be, thereby adding self-censorship as a variable into the decision-making process.

The XO, OOD, and FTOW never questioned the CO's orders regarding the unattainable periscope depth command. None of the three questioned the CO regarding

his abbreviated and nonstandard periscope sweeps either. This watch team appears to have been unwilling to deviate from group consensus, of which, ironically, there was none. If just one had been willing to speak out, the accident probably would have been avoided.

Did the crew keep silent about their misgivings and even minimize to themselves the importance of their doubts?

This has been discussed numerous times in answers to previous questions. Specifically the XO, FTOW, and others had concerns about how the maneuver was progressing but they never voiced them to the CO.

Was there an illusion of unanimity?

This symptom occurs when self-censorship and other devices create an environment of unanimity concerning judgments conforming to the majority view. This environment is also facilitated by the false assumption that silence means consent (Janis 1982, 174-175).

Did the crew share the belief that all were in agreement with the decision?

By maintaining its silence to the CO, the entire watch team set conditions so that no one else was aware of the others' concerns. The crew's belief in the CO and his abilities unknowingly silenced those with the necessary information that could have helped avoid disaster. In this situation just one of the three main players voicing his concern could have caused the CO to rethink his actions and potentially avoided the actions which led to the accident.

Did the crew believe that silence on the part of crewmembers indicated that they were in agreement with what was being expressed?

Admiral Griffiths testified at the NCOI by sharing his opinion about Commander Waddle. He states, "Waddle has been portrayed as a charismatic leader whose expertise and success at sea, paradoxically, may have undermined him because his crew was reluctant to second-guess his judgment" (Sanchez 2001, 1). In this case "silence was not golden." The silence of the crew gave the CO the impression that his crew was unanimously in agreement with his actions and that no concerns were readily apparent.

Was there direct pressure on dissenters?

This symptom involves the group using direct social pressure on any members who express dissent with the majority's views, stereotypes, proposed solution, or commitment. Group pressures and norms make it clear that dissenting viewpoints and behavior are contrary to expected group norms of loyalty (Janis 1982, 174-175).

Was direct pressure applied to any members who expressed doubts or who questioned the validity of decisions?

The author found no evidence of direct pressure placed upon any of the watch team with regards to expressing doubts or the validity of their decisions. However, direct pressure was applied to the OOD by the CO in taking over the conn and becoming intimately involved in all evolutions. Additionally, the fact that the CO took over these evolutions and did not follow his own standing orders added to the climate which had been building all day. The CO's comments to the navigator and XO could be interpreted as direct pressure when he informed both of them on at least four occasions that he was in

control with regards to the return schedule to Pearl Harbor (NCOI 2001, 28 and 32). For all intents and purposes, through his actions, Commander Waddle preempted dissent.

<u>Were there self-appointed mindguards?</u>

This happens when members of the group take it upon themselves to protect the group from adverse information that could threaten the group's shared complacency and to keep others in line with the supposed consensus (Janis 1982, 174-175).

Did crewmembers appoint themselves as mindguards to protect the leader from adverse information?

Although the watch team withheld critically important information from the CO it does not appear that anyone was doing it out of a protecting role. No one knowingly appointed himself as mindguard, except possibly the CO himself.

During this analysis the author has purposefully avoided commenting on the sixteen civilian guests and what, if any, impact their presence on board might have been. In actuality their impact was minimal at all levels; however, in this instance their presence caused crewmembers to possibly act as mindguards. In one specific instance a senior officer on board the USS *Greeneville* said he felt the crew was rushing through a surfacing maneuver, but he never spoke up--in part because he did not want to question the CO in front of the civilian guests and crew (Christensen 2001, np).

<div align="center">Summary</div>

The evidence infers that numerous groupthink conditions were present on board the *Greeneville* during the evolution that led to the accident with the *Ehime Maru*. Combine these conditions with cohesiveness and, according to Janis, enough elements

(cohesiveness plus one other) of groupthink have been identified as being present to constitute groupthink as a significant factor in the defective decision-making process on board the *Greeneville*. It also appears that certain groupthink consequences were present on board the USS *Greeneville* as well. Most significant were the illusion of invulnerability, collective rationalization, self-censorship, and, to a lesser extent, the illusion of unanimity. The presence of these symptoms and consequences leads to a lower probability of successful outcomes.

The mere fact that cohesiveness, groupthink conditions, and consequences were present does not necessarily mean that groupthink was present or that it was a factor in the *Greeneville's* accident with the *Ehime Maru*. In chapter 5 all information and data will be intertwined to determine the presence or the lack of groupthink on board the *Greeneville* when she collided with the *Ehime Maru*.

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[1]The officer of the deck (OOD) is the officer who has control of the vessel to include maneuver and taking actions to ensure the safety of the vessel (emergency deep, surface, etc.). The OOD has control and responsibility of the vessel until properly relieved by a fully qualified officer. At anytime the CO of the vessel can take the conn (legal authority to maneuver the vessel only, not to take actions to ensure safety of the vessel) and the OOD will announce, "The CO has the conn." (If the CO wants to take actions to ensure the safety of the vessel he must also take the deck) This process is repeated every time OOD's are changed as well.

[2]The FTOW is responsible for tracking all sonar contacts in the fire control system as well as graphically placing them on a paper chart, called the Contact Evaluation Plot, which is displayed in the control room so all the key watch standers can get a visual image of the surface contacts that the submarine is tracking.

[3]S-13 refers to the manner in which technicians on submarines track contacts. The letter S signifies a sonar contact and the number is assigned in numerical order as the contacts are gained.

[4]Target motion analysis (TMA) is the study of relative motion, where a submarine determines the bearing, bearing rate, range, course, and speed of surface contacts relative to own ship. The process takes sonar data and develops parameters of movement through

a coordinated, logical series of assumptions, solutions, and refinements. The submarine's computer solutions provide assistance and confirmation to human mental analysis, training, and experience. Information ascertained through TMA allows the submarine to determine the surface contact situation and safely proceed to periscope depth. While at periscope depth, submarines employ additional visual and electronic sensors to assist in identifying and maintaining situational awareness of surface contacts. (NCOI 2001, 35)

[5]Naval Warfare Publications are the doctrine of the United Sates Navy's warfare communities.

[6]The AVSDU is a sonar repeater in the Control Room of a submarine, which allows the OOD and others in the control room to view sonar displays. The fact that the AVSDU was out of commission is not a reason to cancel an underway yet compensatory measures to ensure situational awareness of sonar contacts would be both expected and required (NCOI 2001, 17).

[7]The CEP, Contact Evaluation Plot, is a running contact history, displayed, for the benefit of the Control Room watch standers and officers.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

> A leader is best when people barely know he exists, not so good
> when people obey and acclaim him, worse when they despise
> him.... But of a good leader who talks little when his work is done,
> his aim fulfilled, they will say, "We did it ourselves."
> (brainyquotes 2002, 1).

Lao Tzu

Introduction

Groupthink is one of many factors contributing to the quality of decisions. It would be unwise to assume that groupthink is a cause for all poor decisions, fiascoes, or accidents. The groupthink theory tells us that when symptoms of groupthink are present there is a greater likelihood of poor decision outcomes. As stated in chapter 1, it is important to note that groupthink does not always result in bad decisions. It is possible that, even if groupthink is present, through the biases, consensus level, and desire for conformity of the group, a good decision could still be made. On the flip side of this, it is important to realize that by simply avoiding groupthink one is not necessarily safe from making poor decisions. Other factors such as good fortune, luck, a rush for time, and the actions of others that one does not expect, could impact the eventual outcome and result in a good decision. Other aspects are involved and must be accounted for, such as competence, technical skill, and organizational makeup, and they can affect the quality of the decision. The value in knowing what groupthink is and what causes it is that as a leader one is better prepared to recognize and then implement methods and procedures to eliminate it.

Janis' work in this area is substantial, particularly in his theory's ability to assist decision-making groups become aware of how they get on the road to groupthink, even if their groups are cohesive, intelligent, and dedicated. It is hoped that through Janis' theory and the findings and evidence of this paper with regards to the USS *Greeneville* accident, military and civilian leaders will learn to see more clearly groupthink occurring in their organization.

Conclusion

Based on the analysis of evidence presented, it is reasonable to conclude that a defective decision-making process was present and that significant groupthink symptoms were present on board the USS *Greeneville* when she collided with the *Ehime Maru*. What is not obvious is the impact that groupthink had on the accident itself. The NCOI lists numerous causes, with leadership faults being the most prevalent issue noted. The report does not mention groupthink specifically nor the subject of small group dynamics. Elmes and Giemmill argue in a 1990 paper for *Small Group Research*, "the regressive leader member relationship is characterized by childlike dependence of members upon the leader; under the spell of the leader, they renounce their own critical thinking and relegate it to the role of the leader who they blindly follow" (35). Maier (1950) has argued that all groups experience some kind of pressure towards consensus and that it is the leader's responsibility to mitigate this effect by encouraging diversity.

Most of the groupthink conditions were present on board the USS *Greeneville* during the time leading up to and during the actual emergency blow maneuver that caused the accident with the *Ehime Maru*. The watch team did not engage in behaviors to critically examine alternatives or objectives, they failed to recognize risks, they

conducted a poor information search, they were selective in processing the information at hand, and they promoted the leader's preference without question. These behaviors suggest that groupthink antecedent conditions were present and contributed to a defective decision-making process. The emergence of groupthink symptoms and decision-making defects provides support for the causal link Janis' theory implied; where there are groupthink symptoms, defective decisions occur.

Remember what Commander Waddle said about that day after he had time to reflect: "[I] may have been regarded too highly by my men. I so truly believed in my professional ability, and I believed in my men so much, and they also believed in me. It was that relationship that led to my demise. Because when I said I didn't see anything [during the periscope search], there was nothing there--that was the truth for them" (McCarthy and McCabe 2001, 33). The power of the groupthink phenomenon is amazing and is underestimated by many.

Recommendations

The development of groupthink is a very real possibility in military organizations with their esprit de corps and cohesion. The inherent rank structure of military units, with their subordinate, peer, and superior classes, is conducive for the introduction of the phenomenon as well. The U.S. Navy has not spent enough time researching, studying, discussing, and teaching groupthinks conditions and consequences to its people, as well as how to prevent and neutralize it. Additionally, the Navy has not spent enough time studying the impact of group behaviors and pressures on decision making. As evidenced with the *Greeneville* accident, the CO and crew need to understand and appreciate the

potential risks of directive leadership when promoting their preferred way of accomplishing tasks.

As a result of the CO's (or any leader) role in the decision process he is the critical individual who can ameliorate the environment to prevent the occurrence of groupthink. The leader's role will fall into two specific, related areas: leadership and command climate. The CO of the USS *Greeneville* did not do well at either of these on the day of the accident. As presented in earlier chapters, leadership style is extremely important in controlling the presence of groupthink. An impartial leadership style will result in higher quality decisions than a directive leadership style. The desired goal is a leadership style that encourages questioning, doubt, a search for alternatives, and a thorough information search, and promotes procedural norms that result in a higher quality decision by all.

Command climate is also important, as it should allow for critical thinking and analysis by the entire organization. The climate should encourage an open and unbiased exploration for ideas and methods to accomplish tasks. The leader must not take silence for consent and must understand how his leadership, power, and personality affect the performance of his organization.

Understanding groupthink and group dynamics and the potential negative results which can result from them is imperative. Accordingly, officer training should include the teaching of group dynamics, groupthink, and group decision making. The Navy should seriously consider integrating the subjects of group dynamics, groupthink, and group decision making into all levels of leadership training from the ensign to the captain

level, as well as including petty officers and chief petty officers. The subjects should be taught in detail at all leadership classes, including the PCO/PXO course at Newport.

Further Research

Further research needs to be accomplished in the area of groupthink and small group dynamics with regards to the Navy environment. There are numerous past incidents where poor decisions have been made that could be investigated to see if groupthink symptoms were present. This research should not only focus on the conditions and consequences of groupthink but also delve into the culture of the Navy and how its officers and petty officers are trained to deal with each other.

Since this thesis was researched and written without the benefit of first-hand interviews and was, thus, based on opinion based on the facts, further research could be conducted. Specifically, personal interviews of the key players, with questions tailored to reveal the groupthink phenomenon, could no doubt reveal new and undiscovered information. It is, therefore, recommended that future research include personal interviews to further identify the command climate and the influence groupthink may or may not have had.

Further research should include studies that deal with culture, leadership, and command climate as it relates to an operational environment. Additional studies and research might focus on how the Navy and, for that matter, the armed forces in general can improve their ability to recognize groupthink and avoid its tendencies and consequences.

The question now remains, How does a cohesive group avoid groupthink? Janis, as well as others, has tried to offer solutions to elude groupthink. Janis offers that

groupthink will not occur when certain conditions are present or special precautions are taken that counteract concurrence seeking tendencies (1972, 199). Janis proposes nine ways in which to safeguard against groupthink that have been reworded as questions a leader might use to check the current environment or a researcher could use to ascertain the effectiveness of them. Research needs to examine whether or not Janis' proposals could counteract groupthink tendencies in a military unit. Janis' nine ways to safeguard against groupthink are paraphrased as questions below:

1. Did the leader establish an environment by assigning the role of critical evaluator to each member? Is the leader open to other ideas and ensuring the climate is open for criticism and objection?

2. Does the leader practice impartial leadership thereby ensuring his preferred method is not blindly accepted and followed?

3. Does the leader allow two or three work groups to work on the same issue or problem (when feasible) to ensure other ideas and methods are looked at?

4. When evaluating alternatives does the leader allow the policy making group time to divide into two or more subgroups to meet separately, under different chairpersons, and then come together to hammer out their differences?

5. Does the decision group periodically discuss the group's ideas and concerns with trusted associates of their own organization and bring that feedback back to the group?

6. Are experts outside the group, but members of the organization, asked to participate and encourage alternative ideas to those being discussed in the group?

7. Is someone in the group appointed as a devil's advocate at every meeting?

8. Are warning signals taken seriously and an appropriate amount of time given at meetings to discuss the warnings, their causes, potential effects, and long-term consequences?

9. After decisions are made is a significant pause allowed so that upon meeting again members are able to express their residual doubts and to rethink the issue before finalizing and implementing the decision (Janis 1982, 304-309)?

Military leaders cannot follow all the above suggestions all the time, nor can most leaders. However, by studying groupthink phenomena--becoming more aware of what causes them, their conditions and consequences, and how leaders can prevent it--they will be better prepared to ensure the success of their organization.

Summary

Commander Waddle was a good CO. He was a brilliant tactician, was concerned about the welfare of his crew, and had earned the respect of all--from his admiral, his crew and other submarine COs and crews along the waterfront. His demise on 9 February was his inability to recognize the small group dynamic and groupthink symptoms that were present on the *Greeneville*. Groupthink did not cause the accident, as there were many other errors in judgment that occurred that day. However, it is the author's opinion, based on the analysis in chapter 4, that had the CO been aware of the groupthink phenomenon and its warning signs this tragedy may have been avoided.

EPILOGUE

On 27 January 2002 the USS *Greeneville* was involved in its third mishap in less than a year. The *Greeneville* collided with the amphibious transport ship, the USS *Ogden,* while she was transferring sailors who were being sent home on emergency leave. The collision caused minor damage to both vessels and both were able to continue on to different ports for repair and inspection.

Thomas Ricks, writes in the 29 January 2002 issue of the *Washington Post* "The *Greeneville's* latest mishap provoked discussions about the submarine's apparent run of bad luck." "Not again," was the title of the discussion on one web site for submarine veterans, with several contending that the *Greeneville* is a jinxed ship (2002, A03).

Although the Navy does not believe in "bad luck" or "jinxing" of Navy vessels, some retired submarine officers feel that the admirals in charge of the *Greeneville* may bear some of the blame for failing to properly assess the crew's problems (Ricks 2002, A03).

At the time of this incident the USS *Greeneville* was on its fifth commanding officer in less than a year, and the sixth may be just around the corner.

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